

239

**BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA**

TECHNICAL MEMORANDUM

**STOCKPILE PLACEMENT/DISPOSITION EVALUATION
STOCKPILES SP-19 THROUGH SP-25**

To: Mr. Brian Mossman
Boeing Realty Corporation
3855 Lakewood Blvd.
Building 1A MC D001-0097
Long Beach, CA 90846

From: Haley & Aldrich, Inc.

Date: April 18, 2002

Re: Stockpile Placement/Disposition Evaluation, Boeing Realty Corporation, Stockpiles SP-19 through and SP-25

Haley & Aldrich, Inc. is herein providing this technical memorandum to summarize our recommendations regarding the onsite placement and offsite transport of temporarily stockpiled excavated materials at Parcel C of the Boeing Realty Corporation's (BRC's) Former C-6 Facility in Los Angeles, California (subject parcel). These stockpiles are herein identified as Stockpiles SP-19, SP-20, SP-21, SP-22, SP-23, SP-24, and SP-25.

OVERVIEW/PURPOSE

Potentially impacted materials identified during soil boring installation/well abandonment activities and during demolition monitoring have been excavated to expedite potential onsite remediation activities, thus, reducing the potential for affecting the current redevelopment schedule at the subject parcel. These materials were segregated by the location from which they were excavated and by known or suspected chemical impacts. Representative samples collected from these materials were evaluated using human health risk assessment and groundwater protection evaluation procedures to determine which of the temporary soil stockpiles could be reused onsite and which should be transported offsite to regulated treatment/disposal facilities. The evaluation methodology and the onsite placement/offsite transport recommendations are presented herein.

IDENTIFICATION OF STOCKPILED SOIL

Potentially impacted soils were identified for excavation based on field observations and the results of in-situ samples collected and analyzed following the Los Angeles Regional Water Quality Control Board (LARWQCB)-approved sampling and analysis plan for the subject parcel and the subsequent LARWQCB-approved addenda and supplements. Stockpiled soil was also created from soil cuttings generated during installation of soil borings or well abandonment.

Stockpiles SP-19 through SP-25 were generated between September and November, 2001. SP-19 was generated from an on-site excavation of arsenic impacted soil and contains approximately 5,000 cubic yards of soil. Stockpile SP-20 is comprised of soil cuttings generated during the onsite Building 2 vapor extraction well installation and contains approximately 15 cubic yards of soil. Stockpile SP-21 is comprised of soil cuttings generated during Simulprobe drilling activities and contains approximately 20 cubic yards. Stockpiles SP-22 and SP-24 were generated from onsite stained soil excavations and contain approximately 5 and 40 cubic yards, respectively. Stockpile SP-23 was generated during the abandonment of onsite vapor extraction wells and contains approximately 10 cubic yards. SP-25 is comprised of soil cuttings generated during the Building 1 vapor extraction well installation on Parcel C and contains approximately 4 cubic yards of soil.

STOCKPILE CHARACTERIZATION METHODOLOGY

Stockpiles SP-19 through SP-25 were characterized between September and November, 2001. Twenty representative samples were obtained from Stockpile SP-19, one representative soil sample each was obtained from Stockpile SP-20 and from Stockpile SP-25, and two representative soil sample were obtained from each of Stockpiles SP-21, SP-23, and SP-24. Two soil samples obtained from in-place soils from which Stockpile SP-22 was generated were used to characterize the associated stockpiled soil. Samples obtained from the stockpiles were discrete samples. It is assumed that these samples represent the maximum concentrations of chemicals detected in their respective stockpile. Each of the stockpile samples was analyzed for suspected chemical constituents following the protocols presented in the LARWQCB-approved sampling and analysis plan for the subject parcel and the subsequent LARWQCB-approved addenda and supplements.

STOCKPILE EVALUATION METHODOLOGY

The stockpile sample results for Stockpiles SP-19 through SP-25 were evaluated prior to November 2001 using screening human health risk assessment (SRA) procedures as described in the November 29, 2000 Risk Assessment Work Plan (RAWP) for the subject parcel following the decision process summarized in Figure 1. In addition, maximum volatile organic compound (VOC) concentrations for each stockpile were evaluated to assess whether VOC concentrations in the stockpiles have the potential to degrade existing groundwater quality. The evaluation procedures used herein are similar to those used during the evaluation of Stockpiles SP-1 through SP-18.

Human Health Risk Evaluation

The maximum concentrations detected in each stockpile were separately compared to the maximum concentrations detected within each of three areas of the subject parcel. These three areas of the subject parcel are identified as the Building 1 Exposure Area, the Building 2 Exposure Area, and the Parcel C Exposure Area (Figure 2). The Building 1 and 2 Exposure Areas are defined by two areas of elevated VOC impacts at and in proximity to former Buildings 1 and 2, respectively. The remaining portion of the subject parcel (Parcel C Exposure Area) contains relatively low chemical concentrations and/or smaller impacted areas. Where the stockpile concentrations were greater than the maximum in-situ concentrations they were used in the SRA calculations to assess whether adding the stockpile to that area resulted in risk above the LARWQCB- and Office of Environmental Health Hazard Assessment (OEHHA)-approved target risk levels.

Groundwater Protection Evaluation

Even though shallow groundwater beneath and in proximity to the subject parcel is not used as a domestic water supply, the evaluation conservatively assumed potential downward VOC migration from soil resulting in possible degradation of the Bellflower aquitard to levels greater than the California drinking water standards (i.e. Maximum Contaminant Levels [MCLs]). The assessment was conducted assuming a conservative scenario regarding chemical migration and mixing in groundwater following approved U.S. Environmental Protection Agency and LARWQCB methodology and assumptions. This evaluation was conducted by comparing maximum VOC concentrations to site-specific soil screening levels (SSLs) derived from primary MCLs.

Initial site-specific SSLs were derived using the formula presented in Section 2.5 of the EPA document entitled *Soil Screening Guidance: Technical Background Document (TBD)*, dated July 1996, and site-specific geotechnical parameters. The EPA SSL equation is a partitioning formula, which does not account for chemical attenuation during migration in soil or mixing with groundwater. To better represent contaminant migration in the soil column, an attenuation factor of 16 was applied to the initial SSL. This attenuation factor was obtained from Table 5-14 of the LARWQCB's May 1996 *Interim Site Assessment & Cleanup Guidebook*, assuming site-specific average soil particle size distributions, and a distance of 53 feet from soil impacts to the groundwater table (i.e., stockpiled material to be placed onsite at a maximum depth of 12 feet below ground surface (bgs) or shallower, and the water table is located at a depth of 65 feet bgs). An EPA default dilution attenuation factor (DAF) of 20 was also applied to the initial SSL to account for limited groundwater mixing. This EPA default value is presented in the above-referenced July 1996 EPA document, and was used by EPA to develop generic SSLs. The resulting site-specific SSL is, thus, equal to the initial SSL (assuming no soil attenuation or groundwater mixing) multiplied by the product of a soil attenuation factor of 16 and a groundwater mixing factor of 20.

RECOMMENDATIONS

The recommendation for onsite reuse of each stockpile is based on whether the target risk levels are exceeded after evaluation of the maximum concentrations detected in that stockpile to the SRA calculations for each exposure area at Parcel C, and on whether maximum VOC concentrations may degrade groundwater quality to concentrations greater than MCLs. If the estimated risk remains below the target risk levels for that exposure area of the subject parcel and VOC concentrations would not degrade groundwater quality to concentrations greater than MCLs, it is recommended that the stockpile be reused in that area of the subject parcel. If, at each of the three onsite exposure areas, the estimated risk is greater than a target risk level or if VOC concentrations may degrade groundwater quality to concentrations greater than MCLs, it is recommended that the stockpile be transported offsite to a regulated treatment/disposal facility.

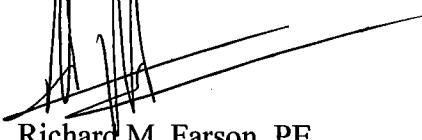
A summary of the recommendations for the stockpiles is presented in Table 1. The laboratory data for the stockpile samples is presented in Appendix A, and the SSL calculations are presented in Appendix B.

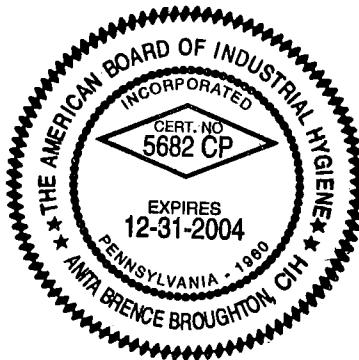
Based on the evaluation results presented herein, the subject stockpiles were either placed onsite or transported offsite to an appropriate regulated facility between September and December, 2001.

Should you have any questions concerning the contents of this memorandum or require additional information, please contact either of the undersigned.

Sincerely yours,
HALEY & ALDRICH, INC.


Anita Broughton, REA, CIH
Risk Assessment Task Manager


Richard M. Farson, PE
Senior Engineer



Attachments:

- Figure 1 Soil Stockpile Reuse Protocol
- Figure 2 Parcel C Exposure Areas
- Table 1 Recommendations for Stockpiles SP-19 through SP-25
- Appendix A Laboratory Reports
- Appendix B Soil Screening Level (SSL) Calculations

Boeing Realty Corporation
3760 Kilroy Airport Way, Suite 500
Long Beach, CA 90806
Telephone: 562-627-4900
FAX: 562-627-4906

06 May 2002
C6-BRC-T-02-009

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013


BOEING

Attention: John Geroch

Subject: **STOCKPILE PLACEMENT/DISPOSITION EVALUATION,
STOCKPILES SP-19 THROUGH SP-25 FOR BOEING REALTY
CORPORATION, FORMER C-6 FACILITY, 19503 SOUTH
NORMANDIE AVENUE, LOS ANGELES, CA**

Dear Mr. Geroch:

Please find enclosed for your review, a copy of the subject document prepared by Haley & Aldrich for Boeing Realty Corporation.

Per our meetings and your verbal approvals on October 25 and 30, 2001 and on January 31, 2002 soil from stockpiles SP-20, SP-21, SP-24, and SP-25 were reused onsite.

If you have any questions concerning this document, please contact the undersigned at 562-593-8623.

Sincerely,



Stephanie Sibbett
Boeing Realty Corporation

Cc: Mario Stavale, Boeing Realty Corporation

enclosure

Table 1
Recommendations for Stockpiles SP-19 through SP-25
BRC Former C-6 Facility, Los Angeles, California

Stockpile No.	Sample IDs	Approx. Volume	Analyses	Acceptable for Onsite Reuse? (Yes or No)	Restrictions on Parcel C Placement?	Recommendations
SP-19	SP-19-A, SP-19-B, SP-19-C, SP-19-D, SP-19-E, SP-19-F, SP-19-G, SP-19-H, SP-19-I, SP-19-J, SP-19-K, SP-19-L, SP-19-M, SP-19-N, SP-19-O, SP-19-P, SP-19-Q, SP-19-R, SP-19-S, SP-19-T	~ 5000 cy	Arsenic, TCLP, STLC	No	NA	Not acceptable for onsite reuse due to elevated arsenic levels. Results from soil samples collected from impacted areas during excavation contained arsenic that resulted in estimated health risks above target risk levels. Treat/dispose of offsite at a regulated facility.
SP-20	SP-20-1	~ 15 cy	PAHs, Metals, VOCs, SVOCs, TPH	Yes	None	Acceptable for reuse in any portion of Parcel C. Addition of analyte concentrations result in health risk below target risk levels, and detected VOCs do not pose a threat to groundwater quality at levels greater than MCLs.
SP-21	SP_21_100201_1, SP_21_100201_2	~ 20 cy	Metals, VOCs, SVOCs, TPH	Yes	Not acceptable for placement inside the Building 2 area	Acceptable for reuse in Parcel C with the exception of the Building 2 area. In these acceptable areas of Parcel C, addition of analyte concentrations result in health risk below target risk levels, and detected VOCs do not pose a threat to groundwater quality at levels greater than MCLs.
SP-22	BUILD_1_B_15_092701_10, BUILD_1_B_15_092701_16	~ 5 cy	Metals, VOCs, PAHs, PCBs, SVOCs, TPH	No	NA	Not acceptable for onsite reuse due to elevated metals and VOC results. Results from soil samples collected from impacted areas during excavation contained VOCs and metals that resulted in estimated health risks above target risk levels. Treat/dispose of offsite at a regulated facility.

Table 1
Recommendations for Stockpiles SP-19 through SP-25
BRCA Former C-6 Facility, Los Angeles, California

SP-23	SP_23_100201_1, SP_23_100201_2	~ 10 cy	Metals, VOCs, SVOCs, PAHs, TPH	No	NA	Not acceptable for onsite reuse due to elevated VOC results. Results from soil samples collected from impacted areas during excavation contained VOC that resulted in estimated health risks above target risk levels. Detected VOCs pose a threat to groundwater quality at levels greater than MCLs. Treat/dispose of offsite at a regulated facility.
SP-24	SP_24_102301_1, SP_24_102301_2	~ 40 cy	Arsenic, Lead, VOCs, PAHs, PCBs, TPH	Yes	None	Acceptable for reuse in any portion of Parcel C. Addition of analyte concentrations result in health risk below target risk levels, and detected VOCs do not pose a threat to groundwater quality at levels greater than MCLs.
SP-25	1-VEW-24-113001	~ 4 cy	Metals, VOCs, PAHs, TPH	Yes	None	Acceptable for reuse in any portion of Parcel C. Addition of analyte concentrations result in health risk below target risk levels, and detected VOCs do not pose a threat to groundwater quality at levels greater than MCLs.

cy = cubic yards

TCLP = Toxicity Characteristic Leaching Procedure

STLC = Soluble Threshold Limit Concentration

VOCs = Volatile Organic Compounds

SVOCs = Semi-volatile Organic Compounds

TPH = Total Petroleum Hydrocarbons

PAHs = Polynuclear Aromatic Hydrocarbons

PCBs = Polychlorinated Biphenyls

Figures

FORMER C-6 FACILITY

SOIL STOCKPILE RE-USE PROTOCOL

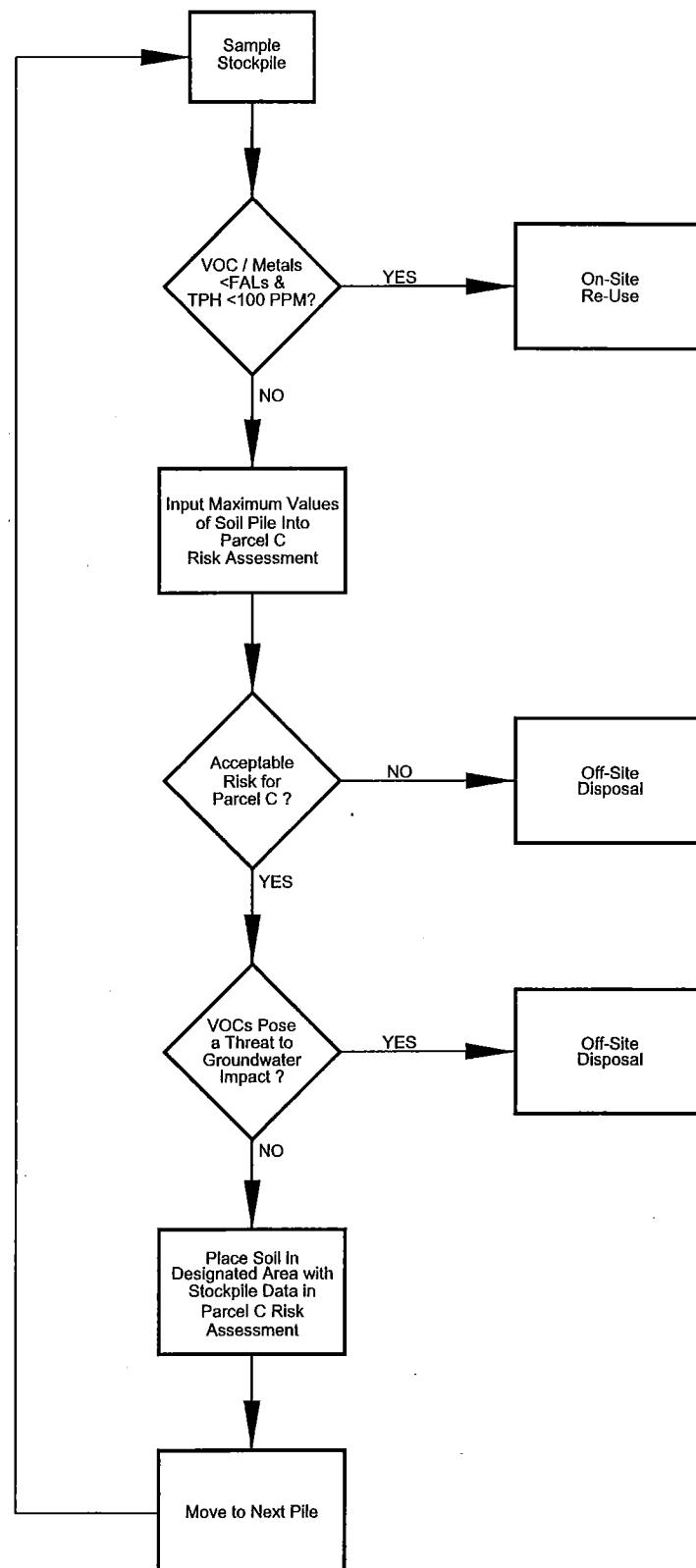
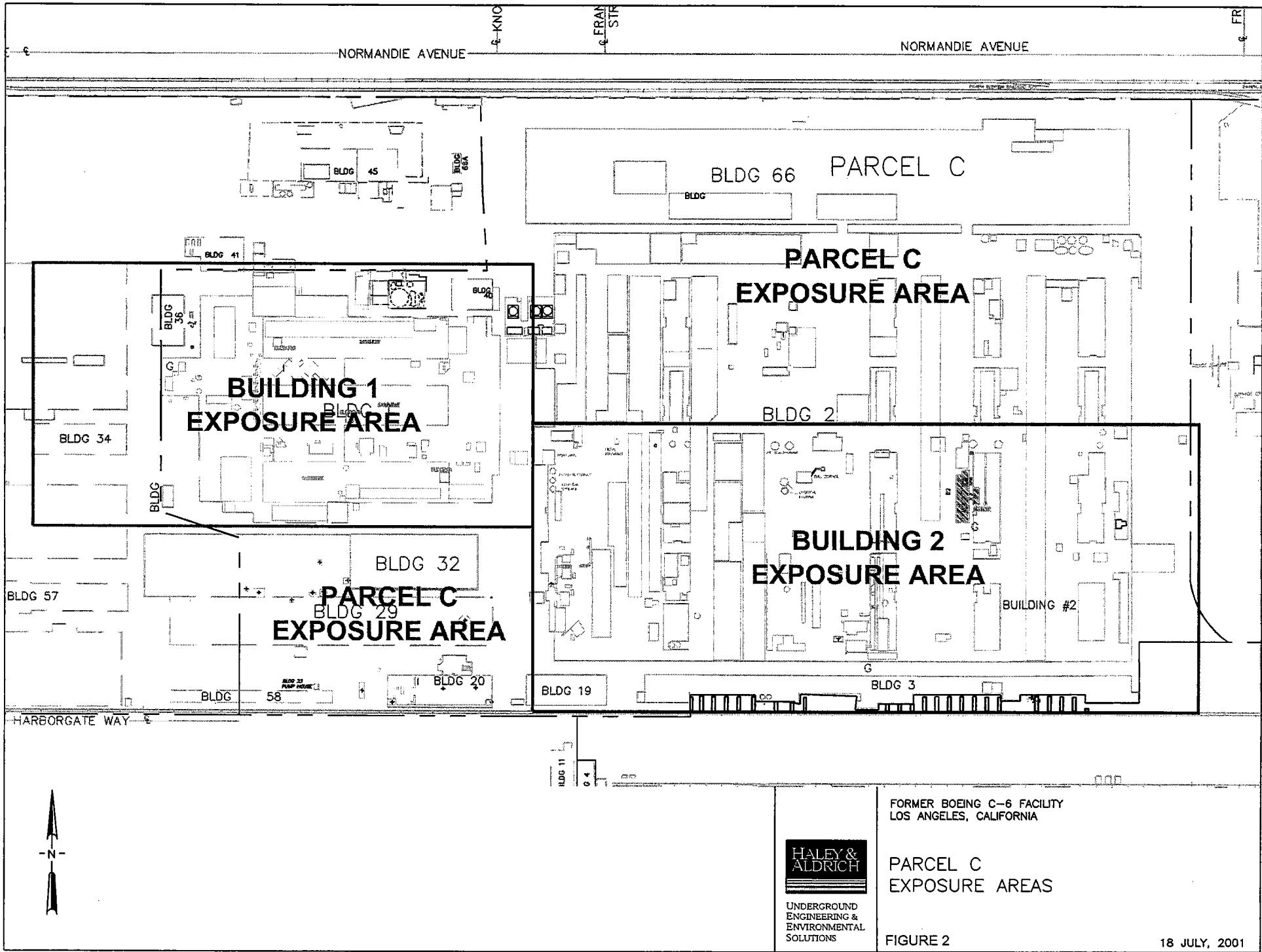


FIGURE 1





FORMER BOEING C-6 FACILITY
LOS ANGELES, CALIFORNIA



HALEY &
ALDRICH
UNDERGROUND
ENGINEERING &
ENVIRONMENTAL
SOLUTIONS

PARCEL C
EXPOSURE AREAS

FIGURE 2

18 JULY, 2001

Appendix A

APPENDIX A
LABORATORY REPORTS

S E V E R N
T R E N T
SERVICES

October 4, 2001

STL LOT NUMBER: E1J010219
NELAP Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

Dear Mr. Zachary,

This report contains the analytical results for the 20 samples received under chain of custody by STL Los Angeles on October 1, 2001. These samples are associated with your BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures met method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report. Additional requests for the Aquatic Toxicity and STLC for arsenic tests performed on sample SP-19-R and has been resubmitted and will be reported under E1J060154.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,



Diane Suzuki
Project Manager
CC: Project File

Page 1 of 000093 total pages in this report.

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STL Los Angeles is a part of Severn Trent Laboratories, Inc.



Chain of Custody Record

SEVERN
TRENT
SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client HALEY & ALDRICH		Project Manager SCOTT ZACHARY		Date 10/1/01	Chain of Custody Number 054104
Address 9040 FRIARS RD, SUITE 220		Telephone Number (Area Code)/Fax Number 619 - 280 - 9210		Lab Number	Page 1 of 2
City SAN DIEGO	State CA	Zip Code 92108	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)
Project Name and Location (State) BOEING C6 - TORRANCE			Carrier/Waybill Number		
Contract/Purchase Order/Quote No. 27285-001			Matrix	Containers & Preservatives	Special Instructions/ Conditions of Receipt HOLD FOR STLC *TCLP IF METALS EXCEED RCRA LEVELS RUN FISH BIOASSAY on HIGHEST
Sample I.D. No. and Description (Containers for each sample may be combined on one line)			Air	STLC	
SP-19-A	Date 10/1/01	Time 3:15:00	X	X	X
SP-19-B					
SP-19-C					
SP-19-D					
SP-19-E					
SP-19-F					
SP-19-G					
SP-19-H					
SP-19-I					
SP-19-J					
SP-19-K					
SP-19-L					
Possible Hazard Identification			Sample Disposal		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client
			<input checked="" type="checkbox"/> Disposal By Lab		
			<input type="checkbox"/> Archive For _____ Months		
			(A fee may be assessed if samples are retained longer than 3 months)		
Turn Around Time Required			QC Requirements (Specify)		
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input checked="" type="checkbox"/> Other. NORMAL+
1. Relinquished By TRAVIS HAMMOND		Date 10/1/01	Time 16:00	1. Received By C. S. Hammond	Date 10-1-01
2. Relinquished By MMH		Date 10-1-01	Time 17:00	2. Received By Pacoh	Date 10-1-01
3. Relinquished By		Date	Time	3. Received By	Date

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

**Chain of
Custody Record**

SEVERN
TRENT
SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client HALEY & ACDRICH			Project Manager SCOTT ZACHARY			Date 10/1/01	Chain of Custody Number 054105							
Address 9040 FRIARS RD SUITE 220			Telephone Number (Area Code)/Fax Number 619-280-9210			Lab Number								
City SAN DIEGO	State CA	Zip Code 92108	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)									
Project Name and Location (State) BOEING C6 - TORRANCE			Carrier/Waybill Number											
Contract/Purchase Order/Quote No. 27285-001			Matrix		Containers & Preservatives		Special Instructions/ Conditions of Receipt HOW FAR STLC + TCLP IF METALS EXCEPT RCRA LEVELS							
			Air	Aqueous	Sed.	Soil		Unpres.	H ₂ SO ₄	HNO ₃	HCl	NaOH	ZnAc ₂ /NaOH	
SP-19-M					X	X							X	HOLD
SP-19-N														
SP-19-O														
SP-19-P														
SP-19-Q														
SP-19-R														
SP-19-S														
SP-19-T														
TITLE 22 METALS														
POTENTIAL HAZARD IDENTIFICATION														
Possible Hazard Identification			Sample Disposal			(A fee may be assessed if samples are retained longer than 3 months)								
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown			<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months											
Turn Around Time Required														
<input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input checked="" type="checkbox"/> Other, Normal			QC Requirements (Specify)											
1. Relinquished By LEAVIS HAYMOND			Date 10/1/01	Time 16:00	1. Received By Smith	Date 10/1/01			Time 16:00					
2. Relinquished By Leaviss			Date 10/1/01	Time 17:00	2. Received By Pacets	Date 10/1/01			Time 17:00					
3. Relinquished By			Date	Time	3. Received By									

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

CHANGE ORDER

Lab Analysis No.	E1J010219
Client Name	Haley + Aldrich
Contact	Beth Breitenbach

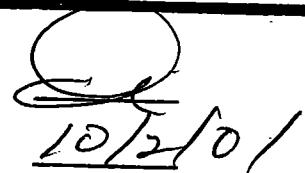
- CANCEL Work ADD Work
- Chain of Custody Discrepancy TAT Change
- Matrix Sample Problem
- Tests Not Defined Other

EXPLANATION/RESOLUTION

Add moisture content to all samples.

Fish loss on samples with highest arsenic hit.

Initiated By:



Date/Time:

10/2/01

Received By: _____

Date/Time: _____

Distribution:

Original - Sample Control/Job Folder; Yellow - Lab; Pink - Initiator
000004

ENS-3008

BOE-C6-0180497

**STL LOS ANGELES
PROJECT RECEIPT CHECKLIST**

Quantums Lot #: E1/010219
Client Name: Haley & Aldrich
Received by: J. Racolta
Delivered by : Client Airborne Fed
 UPS DES Other

Date: 10-1-2001

Quote #: 42295
Project: Boeing C-4
Date/Time Received: 10/1/01 17:00
 DHL In-House Courier Rey B.

Initial / Date

Custody Seal Status: Intact Broken None, R3 1/10/01

Custody Seal #(s): No Seal #

Sample Container(s): STL-LA Client N/A

Temperature(s) (COOLER/BLANK) in °C: 27 °C (CORRECTED TEMP) 24 °C

Thermometer Used: IR (Infra-red) Digital (Probe)

Samples: intact (cc = -33.0°C) Broken Other

No Yes (See Clouseau)

Labeled by _____

Labeling checked by _____

Labelling checked by
.....

Turn Around Time: RUSH-24HR RUSH-48HR RUSH-72HR NORMAL

Short-Hold Notification: Ph Wet Chem Metals (Filter/Pres) Encore N/A

Outside Analysis(es) (Test/Lab/Date Sent Out):

Sample: Conc. oil droplets, 1mm

(Samples come out clearly fine)

*****| LEAVE NO BLANK SPACES : USE N/A |*****

h:HCl na:Sodium Zn:Zinc Acetate/Sodium s: H2SO4 n:HNO3 n/f:HNO3-Field
Hydroxide Hydroxide filtered n/f/l:HNO3-Lab filtered

CGJ:Clear Glass Jar	CBG:Clear Glass Bottle	AGJ:Amber Glass Jar	AGB:Amber Glass Bottle	PB: Poly Bottle	E:Encore Sampler	V:VOA	SL:Sleeve
---------------------	------------------------	---------------------	------------------------	-----------------	------------------	-------	-----------

* Number of VOA's w/ Headspace present

LOGGED BY/DATE: Brooks 10/01/01 REVIEWED BY/DATE: DR 10/01/01
000005

SEVERN
TRENT
SERVICES

Analytical Report

000006

EXECUTIVE SUMMARY - Detection Highlights

E1J010219

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SP_19_A 10/01/01 15:00 001				
Mercury	0.029 B	0.10	mg/kg	SW846 7471A
Aluminum	19700	20.0	mg/kg	SW846 6010B
Arsenic	16.1	1.0	mg/kg	SW846 6010B
Barium	124	2.0	mg/kg	SW846 6010B
Chromium	23.3	1.0	mg/kg	SW846 6010B
Beryllium	0.60	0.50	mg/kg	SW846 6010B
Lead	5.9	0.50	mg/kg	SW846 6010B
Selenium	0.52	0.50	mg/kg	SW846 6010B
Cobalt	9.7	5.0	mg/kg	SW846 6010B
Copper	19.1	2.5	mg/kg	SW846 6010B
Molybdenum	0.60 B	4.0	mg/kg	SW846 6010B
Nickel	15.2	4.0	mg/kg	SW846 6010B
Thallium	1.0	1.0	mg/kg	SW846 6010B
Vanadium	47.7	5.0	mg/kg	SW846 6010B
Zinc	58.8	2.0	mg/kg	SW846 6010B
Percent Moisture	22.1	0.10	%	MCAWW 160.3 MOD
SP_19_B 10/01/01 15:00 002				
Mercury	0.020 B	0.10	mg/kg	SW846 7471A
Aluminum	17100	20.0	mg/kg	SW846 6010B
Arsenic	13.7	1.0	mg/kg	SW846 6010B
Barium	130	2.0	mg/kg	SW846 6010B
Cadmium	0.11 B	0.50	mg/kg	SW846 6010B
Chromium	26.6	1.0	mg/kg	SW846 6010B
Beryllium	0.51	0.50	mg/kg	SW846 6010B
Lead	10.6	0.50	mg/kg	SW846 6010B
Cobalt	10.0	5.0	mg/kg	SW846 6010B
Copper	25.2	2.5	mg/kg	SW846 6010B
Molybdenum	1.4 B	4.0	mg/kg	SW846 6010B
Nickel	19.8	4.0	mg/kg	SW846 6010B
Thallium	1.2	1.0	mg/kg	SW846 6010B
Vanadium	53.2	5.0	mg/kg	SW846 6010B
Zinc	62.8	2.0	mg/kg	SW846 6010B
Percent Moisture	20.1	0.10	%	MCAWW 160.3 MOD
SP_19_C 10/01/01 15:00 003				
Mercury	0.034 B	0.10	mg/kg	SW846 7471A
Aluminum	13800	20.0	mg/kg	SW846 6010B
Arsenic	26.7	1.0	mg/kg	SW846 6010B
Barium	134	2.0	mg/kg	SW846 6010B
Cadmium	0.15 B	0.50	mg/kg	SW846 6010B

(Continued on next page)

000007

EXECUTIVE SUMMARY - Detection Highlights

E1J010219

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SP_19_C 10/01/01 15:00 003				
Chromium	21.7	1.0	mg/kg	SW846 6010B
Beryllium	0.40 B	0.50	mg/kg	SW846 6010B
Lead	14.4	0.50	mg/kg	SW846 6010B
Selenium	0.44 B	0.50	mg/kg	SW846 6010B
Cobalt	8.0	5.0	mg/kg	SW846 6010B
Copper	18.0	2.5	mg/kg	SW846 6010B
Molybdenum	1.3 B	4.0	mg/kg	SW846 6010B
Nickel	17.7	4.0	mg/kg	SW846 6010B
Vanadium	42.9	5.0	mg/kg	SW846 6010B
Zinc	62.9	2.0	mg/kg	SW846 6010B
Percent Moisture	18.9	0.10	%	MCAWW 160.3 MOD
SP_19_D 10/01/01 15:00 004				
Mercury	0.034 B	0.10	mg/kg	SW846 7471A
Aluminum	15700	20.0	mg/kg	SW846 6010B
Arsenic	26.4	1.0	mg/kg	SW846 6010B
Barium	130	2.0	mg/kg	SW846 6010B
Cadmium	0.15 B	0.50	mg/kg	SW846 6010B
Chromium	24.7	1.0	mg/kg	SW846 6010B
Beryllium	0.46 B	0.50	mg/kg	SW846 6010B
Lead	16.2	0.50	mg/kg	SW846 6010B
Selenium	0.51	0.50	mg/kg	SW846 6010B
Cobalt	9.4	5.0	mg/kg	SW846 6010B
Copper	20.2	2.5	mg/kg	SW846 6010B
Molybdenum	1.4 B	4.0	mg/kg	SW846 6010B
Nickel	18.7	4.0	mg/kg	SW846 6010B
Vanadium	49.0	5.0	mg/kg	SW846 6010B
Zinc	68.9	2.0	mg/kg	SW846 6010B
Percent Moisture	18.4	0.10	%	MCAWW 160.3 MOD
SP_19_E 10/01/01 15:00 005				
Mercury	0.037 B	0.10	mg/kg	SW846 7471A
Aluminum	19700	20.0	mg/kg	SW846 6010B
Arsenic	7.1	1.0	mg/kg	SW846 6010B
Barium	165	2.0	mg/kg	SW846 6010B
Chromium	27.1	1.0	mg/kg	SW846 6010B
Beryllium	0.57	0.50	mg/kg	SW846 6010B
Lead	9.7	0.50	mg/kg	SW846 6010B
Selenium	0.56	0.50	mg/kg	SW846 6010B
Cobalt	11.6	5.0	mg/kg	SW846 6010B
Copper	24.0	2.5	mg/kg	SW846 6010B

(Continued on next page)

000008

EXECUTIVE SUMMARY - Detection Highlights

E1J010219

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SP_19_E 10/01/01 15:00 005				
Molybdenum	0.78 B	4.0	mg/kg	SW846 6010B
Nickel	19.8	4.0	mg/kg	SW846 6010B
Vanadium	54.3	5.0	mg/kg	SW846 6010B
Zinc	71.1	2.0	mg/kg	SW846 6010B
Percent Moisture	13.4	0.10	%	MCAWW 160.3 MOD
SP_19_F 10/01/01 15:00 006				
Mercury	0.033 B	0.10	mg/kg	SW846 7471A
Aluminum	22600	20.0	mg/kg	SW846 6010B
Arsenic	14.6	1.0	mg/kg	SW846 6010B
Barium	159	2.0	mg/kg	SW846 6010B
Chromium	29.1	1.0	mg/kg	SW846 6010B
Beryllium	0.63	0.50	mg/kg	SW846 6010B
Lead	9.6	0.50	mg/kg	SW846 6010B
Cobalt	11.5	5.0	mg/kg	SW846 6010B
Copper	24.6	2.5	mg/kg	SW846 6010B
Molybdenum	0.73 B	4.0	mg/kg	SW846 6010B
Nickel	20.3	4.0	mg/kg	SW846 6010B
Vanadium	55.8	5.0	mg/kg	SW846 6010B
Zinc	77.6	2.0	mg/kg	SW846 6010B
Percent Moisture	17.8	0.10	%	MCAWW 160.3 MOD
SP_19_G 10/01/01 15:00 007				
Mercury	0.034 B	0.10	mg/kg	SW846 7471A
Aluminum	16700	20.0	mg/kg	SW846 6010B
Arsenic	9.9	1.0	mg/kg	SW846 6010B
Barium	155	2.0	mg/kg	SW846 6010B
Cadmium	0.31 B	0.50	mg/kg	SW846 6010B
Chromium	28.8	1.0	mg/kg	SW846 6010B
Beryllium	0.47 B	0.50	mg/kg	SW846 6010B
Lead	12.1	0.50	mg/kg	SW846 6010B
Cobalt	10.1	5.0	mg/kg	SW846 6010B
Copper	22.6	2.5	mg/kg	SW846 6010B
Molybdenum	1.4 B	4.0	mg/kg	SW846 6010B
Nickel	20.4	4.0	mg/kg	SW846 6010B
Vanadium	53.9	5.0	mg/kg	SW846 6010B
Zinc	64.7	2.0	mg/kg	SW846 6010B
Percent Moisture	16.8	0.10	%	MCAWW 160.3 MOD

(Continued on next page)

000009

EXECUTIVE SUMMARY - Detection Highlights

E1J010219

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SP_19_H 10/01/01 15:00 008				
Mercury	0.073 B	0.10	mg/kg	SW846 7471A
Aluminum	16800	20.0	mg/kg	SW846 6010B
Arsenic	6.5	1.0	mg/kg	SW846 6010B
Barium	145	2.0	mg/kg	SW846 6010B
Chromium	22.4	1.0	mg/kg	SW846 6010B
Beryllium	0.48 B	0.50	mg/kg	SW846 6010B
Lead	6.7	0.50	mg/kg	SW846 6010B
Selenium	0.57	0.50	mg/kg	SW846 6010B
Cobalt	10.4	5.0	mg/kg	SW846 6010B
Copper	21.2	2.5	mg/kg	SW846 6010B
Molybdenum	0.75 B	4.0	mg/kg	SW846 6010B
Nickel	15.4	4.0	mg/kg	SW846 6010B
Vanadium	47.3	5.0	mg/kg	SW846 6010B
Zinc	52.7	2.0	mg/kg	SW846 6010B
Percent Moisture	16.6	0.10	%	MCAWW 160.3 MOD
SP_19_I 10/01/01 15:00 009				
Mercury	0.024 B	0.10	mg/kg	SW846 7471A
Aluminum	18900	20.0	mg/kg	SW846 6010B
Arsenic	14.4	1.0	mg/kg	SW846 6010B
Barium	128	2.0	mg/kg	SW846 6010B
Chromium	25.5	1.0	mg/kg	SW846 6010B
Beryllium	0.53	0.50	mg/kg	SW846 6010B
Lead	9.0	0.50	mg/kg	SW846 6010B
Selenium	0.55	0.50	mg/kg	SW846 6010B
Cobalt	10.7	5.0	mg/kg	SW846 6010B
Copper	20.9	2.5	mg/kg	SW846 6010B
Molybdenum	0.90 B	4.0	mg/kg	SW846 6010B
Nickel	17.8	4.0	mg/kg	SW846 6010B
Vanadium	51.4	5.0	mg/kg	SW846 6010B
Zinc	59.9	2.0	mg/kg	SW846 6010B
Percent Moisture	17.4	0.10	%	MCAWW 160.3 MOD
SP_19_J 10/01/01 15:00 010				
Aluminum	18500	20.0	mg/kg	SW846 6010B
Arsenic	7.6	1.0	mg/kg	SW846 6010B
Barium	131	2.0	mg/kg	SW846 6010B
Chromium	23.1	1.0	mg/kg	SW846 6010B
Beryllium	0.53	0.50	mg/kg	SW846 6010B
Lead	8.2	0.50	mg/kg	SW846 6010B
Cobalt	10.0	5.0	mg/kg	SW846 6010B

(Continued on next page)

000010

EXECUTIVE SUMMARY - Detection Highlights

E1J010219

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SP_19_J 10/01/01 15:00 010				
Copper	19.7	2.5	mg/kg	SW846 6010B
Molybdenum	0.62 B	4.0	mg/kg	SW846 6010B
Nickel	16.0	4.0	mg/kg	SW846 6010B
Vanadium	47.0	5.0	mg/kg	SW846 6010B
Zinc	51.0	2.0	mg/kg	SW846 6010B
Percent Moisture	17.7	0.10	%	MCAWW 160.3 MOD
SP_19_K 10/01/01 15:00 011				
Mercury	0.024 B	0.10	mg/kg	SW846 7471A
Aluminum	20900	20.0	mg/kg	SW846 6010B
Arsenic	13.1	1.0	mg/kg	SW846 6010B
Barium	163	2.0	mg/kg	SW846 6010B
Chromium	28.3	1.0	mg/kg	SW846 6010B
Beryllium	0.61	0.50	mg/kg	SW846 6010B
Lead	8.6	0.50	mg/kg	SW846 6010B
Cobalt	11.7	5.0	mg/kg	SW846 6010B
Copper	22.8	2.5	mg/kg	SW846 6010B
Molybdenum	0.88 B	4.0	mg/kg	SW846 6010B
Nickel	19.4	4.0	mg/kg	SW846 6010B
Vanadium	57.1	5.0	mg/kg	SW846 6010B
Zinc	59.5	2.0	mg/kg	SW846 6010B
Percent Moisture	17.7	0.10	%	MCAWW 160.3 MOD
SP_19_L 10/01/01 15:00 012				
Mercury	0.024 B	0.10	mg/kg	SW846 7471A
Aluminum	15900	20.0	mg/kg	SW846 6010B
Arsenic	7.7	1.0	mg/kg	SW846 6010B
Barium	152	2.0	mg/kg	SW846 6010B
Chromium	23.2	1.0	mg/kg	SW846 6010B
Beryllium	0.43 B	0.50	mg/kg	SW846 6010B
Lead	5.6	0.50	mg/kg	SW846 6010B
Cobalt	10.6	5.0	mg/kg	SW846 6010B
Copper	23.4	2.5	mg/kg	SW846 6010B
Molybdenum	0.67 B	4.0	mg/kg	SW846 6010B
Nickel	19.4	4.0	mg/kg	SW846 6010B
Vanadium	47.3	5.0	mg/kg	SW846 6010B
Zinc	52.2	2.0	mg/kg	SW846 6010B
Percent Moisture	17.0	0.10	%	MCAWW 160.3 MOD

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000011

EXECUTIVE SUMMARY - Detection Highlights

E1J010219

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
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SP_19_M 10/01/01 15:00 013

Mercury	0.050 B	0.10	mg/kg	SW846 7471A
Aluminum	30400	20.0	mg/kg	SW846 6010B
Arsenic	3.5	1.0	mg/kg	SW846 6010B
Barium	138	2.0	mg/kg	SW846 6010B
Chromium	33.4	1.0	mg/kg	SW846 6010B
Beryllium	0.85	0.50	mg/kg	SW846 6010B
Lead	5.7	0.50	mg/kg	SW846 6010B
Cobalt	11.8	5.0	mg/kg	SW846 6010B
Copper	21.1	2.5	mg/kg	SW846 6010B
Molybdenum	0.33 B	4.0	mg/kg	SW846 6010B
Nickel	22.1	4.0	mg/kg	SW846 6010B
Thallium	1.0	1.0	mg/kg	SW846 6010B
Vanadium	61.3	5.0	mg/kg	SW846 6010B
Zinc	67.0	2.0	mg/kg	SW846 6010B
Percent Moisture	23.2	0.10	%	MCAWW 160.3 MOD

SP_19_N 10/01/01 15:00 014

Mercury	0.032 B	0.10	mg/kg	SW846 7471A
Aluminum	18000	20.0	mg/kg	SW846 6010B
Arsenic	5.4	1.0	mg/kg	SW846 6010B
Barium	142	2.0	mg/kg	SW846 6010B
Cadmium	1.6	0.50	mg/kg	SW846 6010B
Chromium	34.0	1.0	mg/kg	SW846 6010B
Beryllium	0.50	0.50	mg/kg	SW846 6010B
Lead	5.7	0.50	mg/kg	SW846 6010B
Cobalt	9.4	5.0	mg/kg	SW846 6010B
Copper	25.1	2.5	mg/kg	SW846 6010B
Molybdenum	3.1 B	4.0	mg/kg	SW846 6010B
Nickel	28.3	4.0	mg/kg	SW846 6010B
Thallium	0.87 B	1.0	mg/kg	SW846 6010B
Vanadium	73.7	5.0	mg/kg	SW846 6010B
Zinc	64.2	2.0	mg/kg	SW846 6010B
Percent Moisture	20.2	0.10	%	MCAWW 160.3 MOD

SP_19_O 10/01/01 15:00 015

Aluminum	18000	20.0	mg/kg	SW846 6010B
Arsenic	3.7	1.0	mg/kg	SW846 6010B
Barium	157	2.0	mg/kg	SW846 6010B
Chromium	25.2	1.0	mg/kg	SW846 6010B
Beryllium	0.52	0.50	mg/kg	SW846 6010B
Lead	6.2	0.50	mg/kg	SW846 6010B

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000012

EXECUTIVE SUMMARY - Detection Highlights

E1J010219

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SP_19_O 10/01/01 15:00 015				
Selenium	0.42 B	0.50	mg/kg	SW846 6010B
Cobalt	11.4	5.0	mg/kg	SW846 6010B
Copper	21.4	2.5	mg/kg	SW846 6010B
Molybdenum	0.81 B	4.0	mg/kg	SW846 6010B
Nickel	18.9	4.0	mg/kg	SW846 6010B
Vanadium	46.9	5.0	mg/kg	SW846 6010B
Zinc	61.3	2.0	mg/kg	SW846 6010B
Percent Moisture	20.9	0.10	%	MCAWW 160.3 MOD
SP_19_P 10/01/01 15:00 016				
Mercury	0.033 B	0.10	mg/kg	SW846 7471A
Aluminum	24200	20.0	mg/kg	SW846 6010B
Arsenic	4.7	1.0	mg/kg	SW846 6010B
Barium	203	2.0	mg/kg	SW846 6010B
Chromium	29.1	1.0	mg/kg	SW846 6010B
Beryllium	0.69	0.50	mg/kg	SW846 6010B
Lead	6.6	0.50	mg/kg	SW846 6010B
Cobalt	12.2	5.0	mg/kg	SW846 6010B
Copper	28.5	2.5	mg/kg	SW846 6010B
Molybdenum	0.68 B	4.0	mg/kg	SW846 6010B
Nickel	21.4	4.0	mg/kg	SW846 6010B
Vanadium	61.4	5.0	mg/kg	SW846 6010B
Zinc	68.1	2.0	mg/kg	SW846 6010B
Percent Moisture	18.2	0.10	%	MCAWW 160.3 MOD
SP_19_Q 10/01/01 15:00 017				
Mercury	0.029 B	0.10	mg/kg	SW846 7471A
Aluminum	18300	20.0	mg/kg	SW846 6010B
Arsenic	10.1	1.0	mg/kg	SW846 6010B
Barium	149	2.0	mg/kg	SW846 6010B
Chromium	24.9	1.0	mg/kg	SW846 6010B
Beryllium	0.54	0.50	mg/kg	SW846 6010B
Lead	8.0	0.50	mg/kg	SW846 6010B
Selenium	0.56	0.50	mg/kg	SW846 6010B
Cobalt	11.4	5.0	mg/kg	SW846 6010B
Copper	20.6	2.5	mg/kg	SW846 6010B
Molybdenum	0.82 B	4.0	mg/kg	SW846 6010B
Nickel	17.4	4.0	mg/kg	SW846 6010B
Vanadium	50.3	5.0	mg/kg	SW846 6010B
Zinc	53.3	2.0	mg/kg	SW846 6010B
Percent Moisture	19.8	0.10	%	MCAWW 160.3 MOD

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000013

EXECUTIVE SUMMARY - Detection Highlights

E1J010219

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SP_19_R 10/01/01 15:00 018				
Aluminum	14100	20.0	mg/kg	SW846 6010B
Arsenic	32.8	1.0	mg/kg	SW846 6010B
Barium	118	2.0	mg/kg	SW846 6010B
Cadmium	0.28 B	0.50	mg/kg	SW846 6010B
Chromium	20.1	1.0	mg/kg	SW846 6010B
Beryllium	0.41 B	0.50	mg/kg	SW846 6010B
Lead	8.0	0.50	mg/kg	SW846 6010B
Cobalt	10.5	5.0	mg/kg	SW846 6010B
Copper	21.6	2.5	mg/kg	SW846 6010B
Molybdenum	1.3 B	4.0	mg/kg	SW846 6010B
Nickel	16.7	4.0	mg/kg	SW846 6010B
Vanadium	49.0	5.0	mg/kg	SW846 6010B
Zinc	45.6	2.0	mg/kg	SW846 6010B
Percent Moisture	15.2	0.10	%	MCAWW 160.3 MOD
SP_19_S 10/01/01 15:00 019				
Aluminum	21500	20.0	mg/kg	SW846 6010B
Arsenic	9.7	1.0	mg/kg	SW846 6010B
Barium	146	2.0	mg/kg	SW846 6010B
Chromium	27.6	1.0	mg/kg	SW846 6010B
Beryllium	0.60	0.50	mg/kg	SW846 6010B
Lead	7.8	0.50	mg/kg	SW846 6010B
Selenium	0.40 B	0.50	mg/kg	SW846 6010B
Cobalt	12.7	5.0	mg/kg	SW846 6010B
Copper	20.9	2.5	mg/kg	SW846 6010B
Molybdenum	1.6 B	4.0	mg/kg	SW846 6010B
Nickel	19.4	4.0	mg/kg	SW846 6010B
Vanadium	56.0	5.0	mg/kg	SW846 6010B
Zinc	61.0	2.0	mg/kg	SW846 6010B
Percent Moisture	17.3	0.10	%	MCAWW 160.3 MOD
SP_19_T 10/01/01 15:00 020				
Aluminum	16500	20.0	mg/kg	SW846 6010B
Arsenic	15.4	1.0	mg/kg	SW846 6010B
Barium	168	2.0	mg/kg	SW846 6010B
Cadmium	0.25 B	0.50	mg/kg	SW846 6010B
Chromium	24.3	1.0	mg/kg	SW846 6010B
Beryllium	0.48 B	0.50	mg/kg	SW846 6010B
Lead	7.9	0.50	mg/kg	SW846 6010B
Selenium	0.57	0.50	mg/kg	SW846 6010B
Cobalt	9.9	5.0	mg/kg	SW846 6010B

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000014

EXECUTIVE SUMMARY - Detection Highlights

E1J010219

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SP_19_T 10/01/01 15:00 020				
Copper	19.1	2.5	mg/kg	SW846 6010B
Molybdenum	2.1 B	4.0	mg/kg	SW846 6010B
Nickel	17.6	4.0	mg/kg	SW846 6010B
Vanadium	53.1	5.0	mg/kg	SW846 6010B
Zinc	53.1	2.0	mg/kg	SW846 6010B
Percent Moisture	19.1	0.10	%	MCAWW 160.3 MOD

000015

METHODS SUMMARY

E1J010219

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

000016

SAMPLE SUMMARY

E1J010219

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
ELEEA	001	SP_19_A	10/01/01	15:00
ELEEC	002	SP_19_B	10/01/01	15:00
ELEED	003	SP_19_C	10/01/01	15:00
ELEEE	004	SP_19_D	10/01/01	15:00
ELEEF	005	SP_19_E	10/01/01	15:00
ELEEG	006	SP_19_F	10/01/01	15:00
ELEEH	007	SP_19_G	10/01/01	15:00
ELEEJ	008	SP_19_H	10/01/01	15:00
ELEEK	009	SP_19_I	10/01/01	15:00
ELEEL	010	SP_19_J	10/01/01	15:00
ELEEM	011	SP_19_K	10/01/01	15:00
ELEEN	012	SP_19_L	10/01/01	15:00
ELEEP	013	SP_19_M	10/01/01	15:00
ELEEQ	014	SP_19_N	10/01/01	15:00
ELEER	015	SP_19_O	10/01/01	15:00
ELEET	016	SP_19_P	10/01/01	15:00
ELEEV	017	SP_19_Q	10/01/01	15:00
ELEEW	018	SP_19_R	10/01/01	15:00
ELEEX	019	SP_19_S	10/01/01	15:00
ELEEO	020	SP_19_T	10/01/01	15:00

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

000017

HALEY & ALDRICH INC

Client Sample ID: SP_19_A

General Chemistry

**Lot-Sample #....: E1J010219-001 Work Order #....: ELEEA Matrix.....: SOLID
Date Sampled....: 10/01/01 15:00 Date Received...: 10/01/01 17:00**

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Percent Moisture	22.1	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385
		Dilution Factor: 1		Analysis Time...: 11:00	Analyst ID.....: 000022	
		Instrument ID...: W15		MS Run #.....: 1275209	MDL.....:	

000018

HALEY & ALDRICH INC

Client Sample ID: SP_19_B

General Chemistry

Lot-Sample #....: E1J010219-002 Work Order #....: ELEEC Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Percent Moisture	20.1	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385
	Dilution Factor: 1			Analysis Time...: 11:00		Analyst ID.....: 0000229
	Instrument ID...: W15			MS Run #.....: 1275209		MDL.....:

000019

HALEY & ALDRICH INC

Client Sample ID: SP_19_C

General Chemistry

Lot-Sample #....: E1J010219-003 Work Order #....: ELEED Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received..: 10/01/01 17:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-		PREP
					ANALYSIS DATE	BATCH #	
Percent Moisture	18.9	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385	
		Dilution Factor: 1		Analysis Time...: 11:00		Analyst ID.....: 0000229	
		Instrument ID...: W15		MS Run #.....: 1275209		MDL.....:	

000020

HALEY & ALDRICH INC

Client Sample ID: SP_19_D

General Chemistry

Lot-Sample #....: E1J010219-004 Work Order #....: ELEEE Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
Percent Moisture	18.4	0.10	%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
	Dilution Factor: 1			Analysis Time..: 11:00		Analyst ID.....: 0000229
	Instrument ID..: W15			MS Run #.....: 1275209		MDL.....:

000021

HALEY & ALDRICH INC

Client Sample ID: SP_19_E

General Chemistry

Lot-Sample #....: E1J010219-005 Work Order #....: ELEEF Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
Percent Moisture	13.4	0.10	%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
		Dilution Factor: 1		Analysis Time..: 11:00		Analyst ID.....: 0000229
		Instrument ID...: W15		MS Run #.....: 1275209		MDL.....:

000022

HALEY & ALDRICH INC

Client Sample ID: SP_19_F

General Chemistry

**Lot-Sample #....: E1J010219-006 Work Order #....: ELEEG Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received.: 10/01/01 17:00**

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Percent Moisture	17.8	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385
	Dilution Factor: 1			Analysis Time..: 11:00	Analyst ID.....:	0000229
	Instrument ID..: W15			MS Run #.....: 1275209	MDL.....:	

000023

HALEY & ALDRICH INC

Client Sample ID: SP_19_G

General Chemistry

Lot-Sample #....: E1J010219-007 Work Order #....: ELEEH Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-		PREP
					ANALYSIS DATE	BATCH #	
Percent Moisture	16.8	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385	
	Dilution Factor: 1			Analysis Time...: 11:00		Analyst ID.....: 0000229	
	Instrument ID...: W15			MS Run #.....: 1275209		MDL.....:	

000024

HALEY & ALDRICH INC

Client Sample ID: SP_19_H

General Chemistry

Lot-Sample #....: E1J010219-008 Work Order #....: ELEEJ Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
Percent Moisture	16.6	0.10	%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
		Dilution Factor: 1		Analysis Time...: 11:00		Analyst ID.....: 0000229
		Instrument ID...: W15		MS Run #.....: 1275209		MDL.....:

000025

HALEY & ALDRICH INC

Client Sample ID: SP_19_I

General Chemistry

Lot-Sample #....: E1J010219-009 Work Order #....: ELEEK Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Percent Moisture	17.4	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385
		Dilution Factor: 1		Analysis Time...: 11:00		Analyst ID.....: 0000229
		Instrument ID...: W15		MS Run #.....: 1275209		MDL.....:

000026

HALEY & ALDRICH INC

Client Sample ID: SP_19_J

General Chemistry

Lot-Sample #....: E1J010219-010 Work Order #....: ELEEL Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-		PREP
					ANALYSIS DATE	BATCH #	
Percent Moisture	17.7	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385	
	Dilution Factor: 1			Analysis Time...: 11:00			Analyst ID.....: 0000229
	Instrument ID...: W15			MS Run #.....: 1275209			MDL.....:

000027

HALEY & ALDRICH INC

Client Sample ID: SP_19_K

General Chemistry

Lot-Sample #....: E1J010219-011 Work Order #....: ELEEM Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-		PREP
					ANALYSIS DATE	BATCH #	
Percent Moisture	17.7	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385	
	Dilution Factor: 1			Analysis Time...: 11:00		Analyst ID.....: 0000229	
	Instrument ID...: W15			MS Run #.....: 1275209		MDL.....:	

000028

HALEY & ALDRICH INC

Client Sample ID: SP_19_L

General Chemistry

Lot-Sample #....: E1J010219-012 Work Order #....: ELEEN Matrix.....: SOLID
Date Sampled....: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-		PREP
					ANALYSIS DATE	BATCH #	
Percent Moisture	17.0	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385	
		Dilution Factor: 1		Analysis Time...: 11:00		Analyst ID.....: 0000229	
		Instrument ID..: W15		MS Run #.....: 1275209		MDL.....:	

000029

HALEY & ALDRICH INC

Client Sample ID: SP_19_M

General Chemistry

Lot-Sample #....: E1J010219-013 Work Order #....: ELEEP Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Percent Moisture	23.2	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385
		Dilution Factor: 1		Analysis Time...: 11:00	Analyst ID.....:	0000229
		Instrument ID...: W15		MS Run #.....: 1275209	MDL.....:	

000030

HALEY & ALDRICH INC

Client Sample ID: SP_19_N

General Chemistry

Lot-Sample #....: E1J010219-014 Work Order #....: ELEEQ Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-		PREP
					ANALYSIS DATE	BATCH #	
Percent Moisture	20.2	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385	
		Dilution Factor: 1		Analysis Time...: 11:00		Analyst ID.....: 0000229	
		Instrument ID...: W15		MS Run #.....: 1275209		MDL.....:	

000031

HALEY & ALDRICH INC

Client Sample ID: SP_19_O

General Chemistry

**Lot-Sample #....: E1J010219-015 Work Order #....: ELEER Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00**

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	
Percent Moisture	20.9	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385
		Dilution Factor: 1		Analysis Time...: 11:00	Analyst ID.....: 0000229	
		Instrument ID...: W15		MS Run #.....: 1275209	MDL.....:	

000032

HALEY & ALDRICH INC

Client Sample ID: SP_19_P

General Chemistry

**Lot-Sample #....: E1J010219-016 Work Order #....: ELEET Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00**

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Percent Moisture	18.2	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385
	Dilution Factor: 1			Analysis Time...: 11:00	Analyst ID.....: 0000229	
	Instrument ID...: W15			MS Run #.....: 1275209	MDL.....:	

000033

HALEY & ALDRICH INC

Client Sample ID: SP_19_Q

General Chemistry

**Lot-Sample #....: E1J010219-017 Work Order #....: ELEEV Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00**

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Moisture	19.8	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385
	Dilution Factor: 1			Analysis Time...: 11:00	Analyst ID.....: 0000229	
	Instrument ID...: W15			MS Run #.....: 1275209	MDL.....:	

000034

HALEY & ALDRICH INC

Client Sample ID: SP_19_R

General Chemistry

Lot-Sample #....: E1J010219-018 Work Order #....: ELEEW Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-		PREP
					ANALYSIS DATE	BATCH #	
Percent Moisture	15.2	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385	
		Dilution Factor: 1		Analysis Time...: 11:00		Analyst ID.....: 0000229	
		Instrument ID...: W15		MS Run #.....: 1275209		MDL.....:	

000035

HALEY & ALDRICH INC

Client Sample ID: SP_19_S

General Chemistry

Lot-Sample #....: E1J010219-019 Work Order #....: ELEEX Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received..: 10/01/01 17:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-		PREP
					ANALYSIS DATE	BATCH #	
Percent Moisture	17.3	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385	
		Dilution Factor: 1		Analysis Time...: 11:00		Analyst ID.....: 0000229	
		Instrument ID...: W15		MS Run #.....: 1275209		MDL.....:	

000036

HALEY & ALDRICH INC

Client Sample ID: SP_19_T

General Chemistry

**Lot-Sample #....: E1J010219-020 Work Order #....: ELEEO Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received..: 10/01/01 17:00**

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	
Percent Moisture	19.1	0.10	%	MCAWW 160.3 MOD	10/02-10/03/01	1275385
	Dilution Factor: 1			Analysis Time...: 11:00	Analyst ID.....: 0000229	
	Instrument ID...: W15			MS Run #.....: 1275209	MDL.....:	

000037

HALEY & ALDRICH INC

Client Sample ID: SP_19_A

TOTAL Metals

Lot-Sample #....: E1J010219-001 Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00				Matrix.....: SOLID		
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 1275230						
Aluminum	19700	20.0	mg/kg	SW846 6010B	10/02/01	ELEEA1AA
		Dilution Factor: 1		Analysis Time...: 17:23	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0	
Arsenic	16.1	1.0	mg/kg	SW846 6010B	10/02/01	ELEEA1AC
		Dilution Factor: 1		Analysis Time...: 17:23	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEEA1AD
		Dilution Factor: 1		Analysis Time...: 17:23	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60	
Barium	124	2.0	mg/kg	SW846 6010B	10/02/01	ELEEA1AE
		Dilution Factor: 1		Analysis Time...: 17:23	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEA1AF
		Dilution Factor: 1		Analysis Time...: 17:23	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060	
Chromium	23.3	1.0	mg/kg	SW846 6010B	10/02/01	ELEEA1AG
		Dilution Factor: 1		Analysis Time...: 17:23	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Beryllium	0.60	0.50	mg/kg	SW846 6010B	10/02/01	ELEEA1AH
		Dilution Factor: 1		Analysis Time...: 17:23	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050	
Lead	5.9	0.50	mg/kg	SW846 6010B	10/02/01	ELEEA1AJ
		Dilution Factor: 1		Analysis Time...: 17:23	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Selenium	0.52	0.50	mg/kg	SW846 6010B	10/02/01	ELEEA1AK
		Dilution Factor: 1		Analysis Time...: 17:23	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEA1AL
		Dilution Factor: 1		Analysis Time...: 17:23	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	

(Continued on next page)

000038

HALEY & ALDRICH INC

Client Sample ID: SP_19_A

TOTAL Metals

Lot-Sample #....: E1J010219-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Cobalt	9.7	5.0	mg/kg	SW846 6010B	10/02/01	ELEEA1AM	
		Dilution Factor: 1		Analysis Time...: 17:23		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Copper	19.1	2.5	mg/kg	SW846 6010B	10/02/01	ELEEA1AN	
		Dilution Factor: 1		Analysis Time...: 17:23		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.40	
Molybdenum	0.60 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEEA1AP	
		Dilution Factor: 1		Analysis Time...: 17:23		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Nickel	15.2	4.0	mg/kg	SW846 6010B	10/02/01	ELEEA1AQ	
		Dilution Factor: 1		Analysis Time...: 17:23		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Thallium	1.0	1.0	mg/kg	SW846 6010B	10/02/01	ELEEA1AR	
		Dilution Factor: 1		Analysis Time...: 17:23		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.80	
Vanadium	47.7	5.0	mg/kg	SW846 6010B	10/02/01	ELEEA1AT	
		Dilution Factor: 1		Analysis Time...: 17:23		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Zinc	58.8	2.0	mg/kg	SW846 6010B	10/02/01	ELEEA1AU	
		Dilution Factor: 1		Analysis Time...: 17:23		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 1.0	
Prep Batch #...: 1275237							
Mercury	0.029 B	0.10	mg/kg	SW846 7471A	10/02/01	ELEEA1AV	
		Dilution Factor: 1		Analysis Time...: 13:51		Analyst ID.....: 0000230	
		Instrument ID...: M04		MS Run #.....: 1275103		MDL.....: 0.020	

NOTE (S) :

B Estimated result. Result is less than RL.

000039

HALEY & ALDRICH INC

Client Sample ID: SP_19_B

TOTAL Metals

Lot-Sample #....: E1J010219-002		Matrix.....: SOLID				
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00						
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 1275230						
Aluminum	17100	20.0	mg/kg	SW846 6010B	10/02/01	ELEEC1AA
		Dilution Factor: 1		Analysis Time...: 17:58	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0	
Arsenic	13.7	1.0	mg/kg	SW846 6010B	10/02/01	ELEEC1AC
		Dilution Factor: 1		Analysis Time...: 17:58	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEEC1AD
		Dilution Factor: 1		Analysis Time...: 17:58	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60	
Barium	130	2.0	mg/kg	SW846 6010B	10/02/01	ELEEC1AE
		Dilution Factor: 1		Analysis Time...: 17:58	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Cadmium	0.11 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEEC1AF
		Dilution Factor: 1		Analysis Time...: 17:58	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060	
Chromium	26.6	1.0	mg/kg	SW846 6010B	10/02/01	ELEEC1AG
		Dilution Factor: 1		Analysis Time...: 17:58	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Beryllium	0.51	0.50	mg/kg	SW846 6010B	10/02/01	ELEEC1AH
		Dilution Factor: 1		Analysis Time...: 17:58	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050	
Lead	10.6	0.50	mg/kg	SW846 6010B	10/02/01	ELEEC1AJ
		Dilution Factor: 1		Analysis Time...: 17:58	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEC1AK
		Dilution Factor: 1		Analysis Time...: 17:58	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEC1AL
		Dilution Factor: 1		Analysis Time...: 17:58	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	

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000040

HALEY & ALDRICH INC

Client Sample ID: SP_19_B

TOTAL Metals

Lot-Sample #....: E1J010219-002

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Cobalt	10.0	5.0	mg/kg	SW846 6010B	10/02/01	ANALYSIS	ELEEC1AM
		Dilution Factor: 1		Analysis Time...: 17:58		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.10
Copper	25.2	2.5	mg/kg	SW846 6010B	10/02/01	ANALYSIS	ELEEC1AN
		Dilution Factor: 1		Analysis Time...: 17:58		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.40
Molybdenum	1.4 B	4.0	mg/kg	SW846 6010B	10/02/01	ANALYSIS	ELEEC1AP
		Dilution Factor: 1		Analysis Time...: 17:58		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.30
Nickel	19.8	4.0	mg/kg	SW846 6010B	10/02/01	ANALYSIS	ELEEC1AQ
		Dilution Factor: 1		Analysis Time...: 17:58		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.30
Thallium	1.2	1.0	mg/kg	SW846 6010B	10/02/01	ANALYSIS	ELEEC1AR
		Dilution Factor: 1		Analysis Time...: 17:58		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.80
Vanadium	53.2	5.0	mg/kg	SW846 6010B	10/02/01	ANALYSIS	ELEEC1AT
		Dilution Factor: 1		Analysis Time...: 17:58		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.10
Zinc	62.8	2.0	mg/kg	SW846 6010B	10/02/01	ANALYSIS	ELEEC1AU
		Dilution Factor: 1		Analysis Time...: 17:58		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	1.0
Prep Batch #...: 1275237							
Mercury	0.020 B	0.10	mg/kg	SW846 7471A	10/02/01	ANALYSIS	ELEEC1AV
		Dilution Factor: 1		Analysis Time...: 14:00		Analyst ID.....:	0000230
		Instrument ID...: M04		MS Run #.....: 1275103		MDL.....:	0.020

NOTE(S) :

B Estimated result. Result is less than RL.

000041

HALEY & ALDRICH INC

Client Sample ID: SP_19_C

TOTAL Metals

Lot-Sample #....:	E1J010219-003	Matrix.....:	SOLID			
Date Sampled....:	10/01/01 15:00	Date Received...:	10/01/01 17:00			
PARAMETER	RESULT	REPORTING LIMIT	UNITS			
METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #				
Prep Batch #....:	1275230					
Aluminum	13800	20.0	mg/kg	SW846 6010B	10/02/01	ELEED1AA
		Dilution Factor: 1		Analysis Time...:	18:06	Analyst ID.....: 021088
		Instrument ID...: M01		MS Run #.....:	1275100	MDL.....: 8.0
Arsenic	26.7	1.0	mg/kg	SW846 6010B	10/02/01	ELEED1AC
		Dilution Factor: 1		Analysis Time...:	18:06	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....:	1275100	MDL.....: 0.40
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEED1AD
		Dilution Factor: 1		Analysis Time...:	18:06	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....:	1275100	MDL.....: 0.60
Barium	134	2.0	mg/kg	SW846 6010B	10/02/01	ELEED1AE
		Dilution Factor: 1		Analysis Time...:	18:06	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....:	1275100	MDL.....: 0.10
Cadmium	0.15 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEED1AF
		Dilution Factor: 1		Analysis Time...:	18:06	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....:	1275100	MDL.....: 0.060
Chromium	21.7	1.0	mg/kg	SW846 6010B	10/02/01	ELEED1AG
		Dilution Factor: 1		Analysis Time...:	18:06	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....:	1275100	MDL.....: 0.10
Beryllium	0.40 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEED1AH
		Dilution Factor: 1		Analysis Time...:	18:06	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....:	1275100	MDL.....: 0.050
Lead	14.4	0.50	mg/kg	SW846 6010B	10/02/01	ELEED1AJ
		Dilution Factor: 1		Analysis Time...:	18:06	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....:	1275100	MDL.....: 0.30
Selenium	0.44 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEED1AK
		Dilution Factor: 1		Analysis Time...:	18:06	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....:	1275100	MDL.....: 0.40
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEED1AL
		Dilution Factor: 1		Analysis Time...:	18:06	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....:	1275100	MDL.....: 0.10

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000042

HALEY & ALDRICH INC

Client Sample ID: SP_19_C

TOTAL Metals

Lot-Sample #....: E1J010219-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Cobalt	8.0	5.0	mg/kg	SW846 6010B	10/02/01	ELEED1AM	
		Dilution Factor: 1		Analysis Time...: 18:06		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.10
Copper	18.0	2.5	mg/kg	SW846 6010B	10/02/01	ELEED1AN	
		Dilution Factor: 1		Analysis Time...: 18:06		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.40
Molybdenum	1.3 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEED1AP	
		Dilution Factor: 1		Analysis Time...: 18:06		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.30
Nickel	17.7	4.0	mg/kg	SW846 6010B	10/02/01	ELEED1AQ	
		Dilution Factor: 1		Analysis Time...: 18:06		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.30
Thallium	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEED1AR	
		Dilution Factor: 1		Analysis Time...: 18:06		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.80
Vanadium	42.9	5.0	mg/kg	SW846 6010B	10/02/01	ELEED1AT	
		Dilution Factor: 1		Analysis Time...: 18:06		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.10
Zinc	62.9	2.0	mg/kg	SW846 6010B	10/02/01	ELEED1AU	
		Dilution Factor: 1		Analysis Time...: 18:06		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	1.0
Prep Batch #....:	1275237						
Mercury	0.034 B	0.10	mg/kg	SW846 7471A	10/02/01	ELEED1AV	
		Dilution Factor: 1		Analysis Time...: 14:02		Analyst ID.....:	0000230
		Instrument ID...: M04		MS Run #.....: 1275103		MDL.....:	0.020

NOTE(S) :

B Estimated result. Result is less than RL.

000043

HALEY & ALDRICH INC

Client Sample ID: SP_19_D

TOTAL Metals

Lot-Sample #....: E1J010219-004 Matrix.....: SOLID
 Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....:	1275230					
Aluminum	15700	20.0	mg/kg	SW846 6010B	10/02/01	ELEEE1AA
		Dilution Factor: 1		Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0	
Arsenic	26.4	1.0	mg/kg	SW846 6010B	10/02/01	ELEEE1AC
		Dilution Factor: 1		Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEEE1AD
		Dilution Factor: 1		Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60	
Barium	130	2.0	mg/kg	SW846 6010B	10/02/01	ELEEE1AE
		Dilution Factor: 1		Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Cadmium	0.15 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEEE1AF
		Dilution Factor: 1		Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060	
Chromium	24.7	1.0	mg/kg	SW846 6010B	10/02/01	ELEEE1AG
		Dilution Factor: 1		Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Beryllium	0.46 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEEE1AH
		Dilution Factor: 1		Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050	
Lead	16.2	0.50	mg/kg	SW846 6010B	10/02/01	ELEEE1AJ
		Dilution Factor: 1		Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Selenium	0.51	0.50	mg/kg	SW846 6010B	10/02/01	ELEEE1AK
		Dilution Factor: 1		Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEE1AL
		Dilution Factor: 1		Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	

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000044

HALEY & ALDRICH INC

Client Sample ID: SP_19_D

TOTAL Metals

Lot-Sample #....: E1J010219-004

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS				ORDER #
Cobalt	9.4	5.0	mg/kg		SW846 6010B	10/02/01	ELEEE1AM
		Dilution Factor: 1			Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.10	
Copper	20.2	2.5	mg/kg		SW846 6010B	10/02/01	ELEEE1AN
		Dilution Factor: 1			Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.40	
Molybdenum	1.4 B	4.0	mg/kg		SW846 6010B	10/02/01	ELEEE1AP
		Dilution Factor: 1			Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.30	
Nickel	18.7	4.0	mg/kg		SW846 6010B	10/02/01	ELEEE1AQ
		Dilution Factor: 1			Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg		SW846 6010B	10/02/01	ELEEE1AR
		Dilution Factor: 1			Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.80	
Vanadium	49.0	5.0	mg/kg		SW846 6010B	10/02/01	ELEEE1AT
		Dilution Factor: 1			Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.10	
Zinc	68.9	2.0	mg/kg		SW846 6010B	10/02/01	ELEEE1AU
		Dilution Factor: 1			Analysis Time...: 18:15	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 1.0	
Prep Batch #....: 1275237							
Mercury	0.034 B	0.10	mg/kg		SW846 7471A	10/02/01	ELEEE1AV
		Dilution Factor: 1			Analysis Time...: 14:04	Analyst ID.....: 0000230	
		Instrument ID...: M04			MS Run #.....: 1275103	MDL.....: 0.020	

NOTE(S) :

B Estimated result. Result is less than RL.

000045

HALEY & ALDRICH INC

Client Sample ID: SP_19_E

TOTAL Metals

Lot-Sample #....: E1J010219-005 Matrix.....: SOLID
 Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....:	1275230					
Aluminum	19700	20.0	mg/kg	SW846 6010B	10/02/01	ELEEF1AA
		Dilution Factor: 1		Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0	
Arsenic	7.1	1.0	mg/kg	SW846 6010B	10/02/01	ELEEF1AC
		Dilution Factor: 1		Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEEF1AD
		Dilution Factor: 1		Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60	
Barium	165	2.0	mg/kg	SW846 6010B	10/02/01	ELEEF1AE
		Dilution Factor: 1		Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEF1AF
		Dilution Factor: 1		Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060	
Chromium	27.1	1.0	mg/kg	SW846 6010B	10/02/01	ELEEF1AG
		Dilution Factor: 1		Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Beryllium	0.57	0.50	mg/kg	SW846 6010B	10/02/01	ELEEF1AH
		Dilution Factor: 1		Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050	
Lead	9.7	0.50	mg/kg	SW846 6010B	10/02/01	ELEEF1AJ
		Dilution Factor: 1		Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Selenium	0.56	0.50	mg/kg	SW846 6010B	10/02/01	ELEEF1AK
		Dilution Factor: 1		Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEF1AL
		Dilution Factor: 1		Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	

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000046

HALEY & ALDRICH INC

Client Sample ID: SP_19_E

TOTAL Metals

Lot-Sample #....: E1J010219-005

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS			ANALYSIS DATE	ORDER #
Cobalt	11.6	5.0	mg/kg		SW846 6010B	10/02/01	ELEEF1AM
		Dilution Factor: 1			Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.10	
Copper	24.0	2.5	mg/kg		SW846 6010B	10/02/01	ELEEF1AN
		Dilution Factor: 1			Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.40	
Molybdenum	0.78 B	4.0	mg/kg		SW846 6010B	10/02/01	ELEEF1AP
		Dilution Factor: 1			Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.30	
Nickel	19.8	4.0	mg/kg		SW846 6010B	10/02/01	ELEEF1AQ
		Dilution Factor: 1			Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg		SW846 6010B	10/02/01	ELEEF1AR
		Dilution Factor: 1			Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.80	
Vanadium	54.3	5.0	mg/kg		SW846 6010B	10/02/01	ELEEF1AT
		Dilution Factor: 1			Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.10	
Zinc	71.1	2.0	mg/kg		SW846 6010B	10/02/01	ELEEF1AU
		Dilution Factor: 1			Analysis Time...: 18:40	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 1.0	
Prep Batch #....:	1275237						
Mercury	0.037 B	0.10	mg/kg		SW846 7471A	10/02/01	ELEEF1AV
		Dilution Factor: 1			Analysis Time...: 14:05	Analyst ID.....: 0000230	
		Instrument ID...: M04			MS Run #.....: 1275103	MDL.....: 0.020	

NOTE(S) :

B Estimated result. Result is less than RL.

000047

HALEY & ALDRICH INC

Client Sample ID: SP_19_F

TOTAL Metals

Lot-Sample #....: E1J010219-006

Matrix.....: SOLID

Date Sampled...: 10/01/01 15:00 Date Received..: 10/01/01 17:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 1275230						
Aluminum	22600	20.0	mg/kg	SW846 6010B	10/02/01	ELEEG1AA
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0	
Arsenic	14.6	1.0	mg/kg	SW846 6010B	10/02/01	ELEEG1AC
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEEG1AD
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60	
Barium	159	2.0	mg/kg	SW846 6010B	10/02/01	ELEEG1AE
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEG1AF
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060	
Chromium	29.1	1.0	mg/kg	SW846 6010B	10/02/01	ELEEG1AG
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Beryllium	0.63	0.50	mg/kg	SW846 6010B	10/02/01	ELEEG1AH
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050	
Lead	9.6	0.50	mg/kg	SW846 6010B	10/02/01	ELEEG1AJ
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEG1AK
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEG1AL
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	

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000048

HALEY & ALDRICH INC

Client Sample ID: SP_19_F

TOTAL Metals

Lot-Sample #....: E1J010219-006

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Cobalt	11.5	5.0	mg/kg	SW846 6010B	10/02/01	ELEEG1AM	
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Copper	24.6	2.5	mg/kg	SW846 6010B	10/02/01	ELEEG1AN	
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40		
Molybdenum	0.73 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEEG1AP	
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30		
Nickel	20.3	4.0	mg/kg	SW846 6010B	10/02/01	ELEEG1AQ	
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30		
Thallium	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEG1AR	
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.80		
Vanadium	55.8	5.0	mg/kg	SW846 6010B	10/02/01	ELEEG1AT	
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Zinc	77.6	2.0	mg/kg	SW846 6010B	10/02/01	ELEEG1AU	
		Dilution Factor: 1		Analysis Time...: 18:48	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 1.0		
Prep Batch #....: 1275237							
Mercury	0.033 B	0.10	mg/kg	SW846 7471A	10/02/01	ELEEG1AV	
		Dilution Factor: 1		Analysis Time...: 14:07	Analyst ID.....: 0000230		
		Instrument ID...: M04		MS Run #.....: 1275103	MDL.....: 0.020		

NOTE(S) :

B Estimated result. Result is less than RL.

000049

HALEY & ALDRICH INC

Client Sample ID: SP_19_G

TOTAL Metals

Lot-Sample #....: E1J010219-007

Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....:	1275230					
Aluminum	16700	20.0	mg/kg	SW846 6010B	10/02/01	ELEEH1AA
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0	
Arsenic	9.9	1.0	mg/kg	SW846 6010B	10/02/01	ELEEH1AC
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEEH1AD
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60	
Barium	155	2.0	mg/kg	SW846 6010B	10/02/01	ELEEH1AE
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Cadmium	0.31 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEEH1AF
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060	
Chromium	28.8	1.0	mg/kg	SW846 6010B	10/02/01	ELEEH1AG
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Beryllium	0.47 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEEH1AH
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050	
Lead	12.1	0.50	mg/kg	SW846 6010B	10/02/01	ELEEH1AJ
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEH1AK
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEH1AL
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	

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000050

HALEY & ALDRICH INC

Client Sample ID: SP_19_G

TOTAL Metals

Lot-Sample #....: E1J010219-007

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Cobalt	10.1	5.0	mg/kg	SW846 6010B	10/02/01	ELEEH1AM	
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Copper	22.6	2.5	mg/kg	SW846 6010B	10/02/01	ELEEH1AN	
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40		
Molybdenum	1.4 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEEH1AP	
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30		
Nickel	20.4	4.0	mg/kg	SW846 6010B	10/02/01	ELEEH1AQ	
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30		
Thallium	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEH1AR	
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.80		
Vanadium	53.9	5.0	mg/kg	SW846 6010B	10/02/01	ELEEH1AT	
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Zinc	64.7	2.0	mg/kg	SW846 6010B	10/02/01	ELEEH1AU	
		Dilution Factor: 1		Analysis Time...: 18:56	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 1.0		
Prep Batch #....:	1275237						
Mercury	0.034 B	0.10	mg/kg	SW846 7471A	10/02/01	ELEEH1AV	
		Dilution Factor: 1		Analysis Time...: 14:09	Analyst ID.....: 0000230		
		Instrument ID...: M04		MS Run #.....: 1275103	MDL.....: 0.020		

NOTE (S) :

B Estimated result. Result is less than RL.

000051

HALEY & ALDRICH INC

Client Sample ID: SP_19_H

TOTAL Metals

Lot-Sample #....: E1J010219-008

Matrix.....: SOLID

Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....:	1275230					
Aluminum	16800	20.0	mg/kg	SW846 6010B	10/02/01	ELEEJ1AA
		Dilution Factor: 1		Analysis Time...: 19:05	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0	
Arsenic	6.5	1.0	mg/kg	SW846 6010B	10/02/01	ELEEJ1AC
		Dilution Factor: 1		Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEEJ1AD
		Dilution Factor: 1		Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60	
Barium	145	2.0	mg/kg	SW846 6010B	10/02/01	ELEEJ1AE
		Dilution Factor: 1		Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEJ1AF
		Dilution Factor: 1		Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060	
Chromium	22.4	1.0	mg/kg	SW846 6010B	10/02/01	ELEEJ1AG
		Dilution Factor: 1		Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Beryllium	0.48 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEEJ1AH
		Dilution Factor: 1		Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050	
Lead	6.7	0.50	mg/kg	SW846 6010B	10/02/01	ELEEJ1AJ
		Dilution Factor: 1		Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Selenium	0.57	0.50	mg/kg	SW846 6010B	10/02/01	ELEEJ1AK
		Dilution Factor: 1		Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEJ1AL
		Dilution Factor: 1		Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	

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000052

HALEY & ALDRICH INC

Client Sample ID: SP_19_H

TOTAL Metals

Lot-Sample #....: E1J010219-008

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS			ANALYSIS DATE	ORDER #
Cobalt	10.4	5.0	mg/kg		SW846 6010B	10/02/01	ELEEJ1AM
		Dilution Factor: 1			Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.10	
Copper	21.2	2.5	mg/kg		SW846 6010B	10/02/01	ELEEJ1AN
		Dilution Factor: 1			Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.40	
Molybdenum	0.75 B	4.0	mg/kg		SW846 6010B	10/02/01	ELEEJ1AP
		Dilution Factor: 1			Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.30	
Nickel	15.4	4.0	mg/kg		SW846 6010B	10/02/01	ELEEJ1AQ
		Dilution Factor: 1			Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg		SW846 6010B	10/02/01	ELEEJ1AR
		Dilution Factor: 1			Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.80	
Vanadium	47.3	5.0	mg/kg		SW846 6010B	10/02/01	ELEEJ1AT
		Dilution Factor: 1			Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.10	
Zinc	52.7	2.0	mg/kg		SW846 6010B	10/02/01	ELEEJ1AU
		Dilution Factor: 1			Analysis Time...: 19:05	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 1.0	
Prep Batch #....: 1275237							
Mercury	0.073 B	0.10	mg/kg		SW846 7471A	10/02/01	ELEEJ1AV
		Dilution Factor: 1			Analysis Time...: 14:11	Analyst ID.....: 0000230	
		Instrument ID...: M04			MS Run #.....: 1275103	MDL.....: 0.020	

NOTE(S) :

B Estimated result. Result is less than RL.

000053

HALEY & ALDRICH INC

Client Sample ID: SP_19_I

TOTAL Metals

Lot-Sample #....: E1J010219-009

Matrix.....: SOLID

Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ANALYSIS DATE	ORDER #
		LIMIT	UNITS						
Prep Batch #....: 1275230									
Aluminum	18900	20.0	mg/kg		SW846 6010B	10/02/01	ELEEK1AA		
		Dilution Factor: 1			Analysis Time...: 19:13	Analyst ID.....: 021088			
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 8.0			
Arsenic	14.4	1.0	mg/kg		SW846 6010B	10/02/01	ELEEK1AC		
		Dilution Factor: 1			Analysis Time...: 19:13	Analyst ID.....: 0210880			
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.40			
Antimony	ND	6.0	mg/kg		SW846 6010B	10/02/01	ELEEK1AD		
		Dilution Factor: 1			Analysis Time...: 19:13	Analyst ID.....: 0210880			
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.60			
Barium	128	2.0	mg/kg		SW846 6010B	10/02/01	ELEEK1AE		
		Dilution Factor: 1			Analysis Time...: 19:13	Analyst ID.....: 0210880			
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.10			
Cadmium	ND	0.50	mg/kg		SW846 6010B	10/02/01	ELEEK1AF		
		Dilution Factor: 1			Analysis Time...: 19:13	Analyst ID.....: 0210880			
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.060			
Chromium	25.5	1.0	mg/kg		SW846 6010B	10/02/01	ELEEK1AG		
		Dilution Factor: 1			Analysis Time...: 19:13	Analyst ID.....: 0210880			
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.10			
Beryllium	0.53	0.50	mg/kg		SW846 6010B	10/02/01	ELEEK1AH		
		Dilution Factor: 1			Analysis Time...: 19:13	Analyst ID.....: 0210880			
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.050			
Lead	9.0	0.50	mg/kg		SW846 6010B	10/02/01	ELEEK1AJ		
		Dilution Factor: 1			Analysis Time...: 19:13	Analyst ID.....: 0210880			
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.30			
Selenium	0.55	0.50	mg/kg		SW846 6010B	10/02/01	ELEEK1AK		
		Dilution Factor: 1			Analysis Time...: 19:13	Analyst ID.....: 0210880			
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.40			
Silver	ND	1.0	mg/kg		SW846 6010B	10/02/01	ELEEK1AL		
		Dilution Factor: 1			Analysis Time...: 19:13	Analyst ID.....: 0210880			
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.10			

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000054

HALEY & ALDRICH INC

Client Sample ID: SP_19_I

TOTAL Metals

Lot-Sample #....: E1J010219-009

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			ORDER #
Cobalt	10.7	5.0	mg/kg	SW846 6010B	10/02/01	ELEEK1AM	
		Dilution Factor: 1		Analysis Time...: 19:13	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Copper	20.9	2.5	mg/kg	SW846 6010B	10/02/01	ELEEK1AN	
		Dilution Factor: 1		Analysis Time...: 19:13	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40		
Molybdenum	0.90 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEEK1AP	
		Dilution Factor: 1		Analysis Time...: 19:13	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30		
Nickel	17.8	4.0	mg/kg	SW846 6010B	10/02/01	ELEEK1AQ	
		Dilution Factor: 1		Analysis Time...: 19:13	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30		
Thallium	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEK1AR	
		Dilution Factor: 1		Analysis Time...: 19:13	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.80		
Vanadium	51.4	5.0	mg/kg	SW846 6010B	10/02/01	ELEEK1AT	
		Dilution Factor: 1		Analysis Time...: 19:13	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Zinc	59.9	2.0	mg/kg	SW846 6010B	10/02/01	ELEEK1AU	
		Dilution Factor: 1		Analysis Time...: 19:13	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 1.0		
Prep Batch #....: 1275237							
Mercury	0.024 B	0.10	mg/kg	SW846 7471A	10/02/01	ELEEK1AV	
		Dilution Factor: 1		Analysis Time...: 14:12	Analyst ID.....: 0000230		
		Instrument ID...: M04		MS Run #.....: 1275103	MDL.....: 0.020		

NOTE(S) :

B Estimated result. Result is less than RL.

000055

HALEY & ALDRICH INC

Client Sample ID: SP_19_J

TOTAL Metals

Lot-Sample #...: E1J010219-010

Matrix.....: SOLID

Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 1275230						
Aluminum	18500	20.0	mg/kg	SW846 6010B	10/02/01	ELEEL1AA
		Dilution Factor: 1		Analysis Time...: 19:21	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0	
Arsenic	7.6	1.0	mg/kg	SW846 6010B	10/02/01	ELEEL1AC
		Dilution Factor: 1		Analysis Time...: 19:21	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEEL1AD
		Dilution Factor: 1		Analysis Time...: 19:21	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60	
Barium	131	2.0	mg/kg	SW846 6010B	10/02/01	ELEEL1AE
		Dilution Factor: 1		Analysis Time...: 19:21	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEL1AF
		Dilution Factor: 1		Analysis Time...: 19:21	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060	
Chromium	23.1	1.0	mg/kg	SW846 6010B	10/02/01	ELEEL1AG
		Dilution Factor: 1		Analysis Time...: 19:21	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Beryllium	0.53	0.50	mg/kg	SW846 6010B	10/02/01	ELEEL1AH
		Dilution Factor: 1		Analysis Time...: 19:21	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050	
Lead	8.2	0.50	mg/kg	SW846 6010B	10/02/01	ELEEL1AJ
		Dilution Factor: 1		Analysis Time...: 19:21	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEL1AK
		Dilution Factor: 1		Analysis Time...: 19:21	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEL1AL
		Dilution Factor: 1		Analysis Time...: 19:21	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	

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000056

HALEY & ALDRICH INC

Client Sample ID: SP_19_J

TOTAL Metals

Lot-Sample #....: E1J010219-010

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Cobalt	10.0	5.0	mg/kg	SW846 6010B	10/02/01	ELEEL1AM	
		Dilution Factor: 1		Analysis Time...: 19:21		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Copper	19.7	2.5	mg/kg	SW846 6010B	10/02/01	ELEEL1AN	
		Dilution Factor: 1		Analysis Time...: 19:21		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.40	
Molybdenum	0.62 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEEL1AP	
		Dilution Factor: 1		Analysis Time...: 19:21		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Nickel	16.0	4.0	mg/kg	SW846 6010B	10/02/01	ELEEL1AQ	
		Dilution Factor: 1		Analysis Time...: 19:21		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEL1AR	
		Dilution Factor: 1		Analysis Time...: 19:21		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.80	
Vanadium	47.0	5.0	mg/kg	SW846 6010B	10/02/01	ELEEL1AT	
		Dilution Factor: 1		Analysis Time...: 19:21		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Zinc	51.0	2.0	mg/kg	SW846 6010B	10/02/01	ELEEL1AU	
		Dilution Factor: 1		Analysis Time...: 19:21		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 1.0	
Prep Batch #....: 1275237							
Mercury	ND	0.10	mg/kg	SW846 7471A	10/02/01	ELEEL1AV	
		Dilution Factor: 1		Analysis Time...: 14:18		Analyst ID.....: 0000230	
		Instrument ID...: M04		MS Run #.....: 1275103		MDL.....: 0.020	

NOTE(S) :

B Estimated result. Result is less than RL.

000057

HALEY & ALDRICH INC

Client Sample ID: SP_19_K

TOTAL Metals

Lot-Sample #....: E1J010219-011
 Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....:	1275230					
Aluminum	20900	20.0	mg/kg	SW846 6010B	10/02/01	ELEEM1AA
		Dilution Factor: 1		Analysis Time...: 19:30	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0	
Arsenic	13.1	1.0	mg/kg	SW846 6010B	10/02/01	ELEEM1AC
		Dilution Factor: 1		Analysis Time...: 19:30	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEEM1AD
		Dilution Factor: 1		Analysis Time...: 19:30	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60	
Barium	163	2.0	mg/kg	SW846 6010B	10/02/01	ELEEM1AE
		Dilution Factor: 1		Analysis Time...: 19:30	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEM1AF
		Dilution Factor: 1		Analysis Time...: 19:30	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060	
Chromium	28.3	1.0	mg/kg	SW846 6010B	10/02/01	ELEEM1AG
		Dilution Factor: 1		Analysis Time...: 19:30	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Beryllium	0.61	0.50	mg/kg	SW846 6010B	10/02/01	ELEEM1AH
		Dilution Factor: 1		Analysis Time...: 19:30	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050	
Lead	8.6	0.50	mg/kg	SW846 6010B	10/02/01	ELEEM1AJ
		Dilution Factor: 1		Analysis Time...: 19:30	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEM1AK
		Dilution Factor: 1		Analysis Time...: 19:30	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEM1AL
		Dilution Factor: 1		Analysis Time...: 19:30	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	

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000058

HALEY & ALDRICH INC

Client Sample ID: SP_19_K

TOTAL Metals

Lot-Sample #....: E1J010219-011

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Cobalt	11.7	5.0	mg/kg	SW846 6010B	10/02/01	ELEEM1AM	
		Dilution Factor: 1		Analysis Time...: 19:30		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Copper	22.8	2.5	mg/kg	SW846 6010B	10/02/01	ELEEM1AM	
		Dilution Factor: 1		Analysis Time...: 19:30		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.40	
Molybdenum	0.88 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEEM1AP	
		Dilution Factor: 1		Analysis Time...: 19:30		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Nickel	19.4	4.0	mg/kg	SW846 6010B	10/02/01	ELEEM1AQ	
		Dilution Factor: 1		Analysis Time...: 19:30		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEM1AR	
		Dilution Factor: 1		Analysis Time...: 19:30		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.80	
Vanadium	57.1	5.0	mg/kg	SW846 6010B	10/02/01	ELEEM1AT	
		Dilution Factor: 1		Analysis Time...: 19:30		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Zinc	59.5	2.0	mg/kg	SW846 6010B	10/02/01	ELEEM1AU	
		Dilution Factor: 1		Analysis Time...: 19:30		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 1.0	
Prep Batch #....: 1275237							
Mercury	0.024 B	0.10	mg/kg	SW846 7471A	10/02/01	ELEEM1AV	
		Dilution Factor: 1		Analysis Time...: 14:19		Analyst ID.....: 0000230	
		Instrument ID...: M04		MS Run #.....: 1275103		MDL.....: 0.020	

NOTE(S) :

B Estimated result. Result is less than RL.

000059

HALEY & ALDRICH INC

Client Sample ID: SP_19_L

TOTAL Metals

Lot-Sample #....: E1J010219-012

Matrix.....: SOLID

Date Sampled...: 10/01/01 15:00 Date Received..: 10/01/01 17:00

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>			<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>			<u>ANALYSIS DATE</u>	<u>ORDER #</u>
Prep Batch #....:	1275230						
Aluminum	15900	20.0	mg/kg	SW846 6010B	10/02/01	ELEEN1AA	
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 021088		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0		
Arsenic	7.7	1.0	mg/kg	SW846 6010B	10/02/01	ELEEN1AC	
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40		
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEEN1AD	
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60		
Barium	152	2.0	mg/kg	SW846 6010B	10/02/01	ELEEN1AE	
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEN1AF	
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060		
Chromium	23.2	1.0	mg/kg	SW846 6010B	10/02/01	ELEEN1AG	
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Beryllium	0.43 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEEN1AH	
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050		
Lead	5.6	0.50	mg/kg	SW846 6010B	10/02/01	ELEEN1AJ	
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30		
Selenium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEN1AK	
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40		
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEN1AL	
		Dilution Factor: 1		Analysis Time...: 19:38	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		

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000060

HALEY & ALDRICH INC

Client Sample ID: SP_19_L

TOTAL Metals

Lot-Sample #....: E1J010219-012

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Cobalt	10.6	5.0	mg/kg	SW846 6010B	10/02/01	ELEEN1AM	
		Dilution Factor: 1		Analysis Time...: 19:38		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Copper	23.4	2.5	mg/kg	SW846 6010B	10/02/01	ELEEN1AN	
		Dilution Factor: 1		Analysis Time...: 19:38		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.40	
Molybdenum	0.67 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEEN1AP	
		Dilution Factor: 1		Analysis Time...: 19:38		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Nickel	19.4	4.0	mg/kg	SW846 6010B	10/02/01	ELEEN1AQ	
		Dilution Factor: 1		Analysis Time...: 19:38		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEN1AR	
		Dilution Factor: 1		Analysis Time...: 19:38		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.80	
Vanadium	47.3	5.0	mg/kg	SW846 6010B	10/02/01	ELEEN1AT	
		Dilution Factor: 1		Analysis Time...: 19:38		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Zinc	52.2	2.0	mg/kg	SW846 6010B	10/02/01	ELEEN1AU	
		Dilution Factor: 1		Analysis Time...: 19:38		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 1.0	
Prep Batch #....:	1275237						
Mercury	0.024 B	0.10	mg/kg	SW846 7471A	10/02/01	ELEEN1AV	
		Dilution Factor: 1		Analysis Time...: 14:39		Analyst ID.....: 0000230	
		Instrument ID...: M04		MS Run #.....: 1275103		MDL.....: 0.020	

NOTE(S) :

B Estimated result. Result is less than RL.

000061

HALEY & ALDRICH INC

Client Sample ID: SP_19_M

TOTAL Metals

Lot-Sample #....: E1J010219-013

Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....:	1275230					
Aluminum	30400	20.0	mg/kg	SW846 6010B	10/02/01	ELEEP1AA
		Dilution Factor: 1		Analysis Time...: 19:46	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0	
Arsenic	3.5	1.0	mg/kg	SW846 6010B	10/02/01	ELEEP1AC
		Dilution Factor: 1		Analysis Time...: 19:46	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEEP1AD
		Dilution Factor: 1		Analysis Time...: 19:46	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60	
Barium	138	2.0	mg/kg	SW846 6010B	10/02/01	ELEEP1AE
		Dilution Factor: 1		Analysis Time...: 19:46	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEP1AF
		Dilution Factor: 1		Analysis Time...: 19:46	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060	
Chromium	33.4	1.0	mg/kg	SW846 6010B	10/02/01	ELEEP1AG
		Dilution Factor: 1		Analysis Time...: 19:46	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Beryllium	0.85	0.50	mg/kg	SW846 6010B	10/02/01	ELEEP1AH
		Dilution Factor: 1		Analysis Time...: 19:46	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050	
Lead	5.7	0.50	mg/kg	SW846 6010B	10/02/01	ELEEP1AJ
		Dilution Factor: 1		Analysis Time...: 19:46	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEP1AK
		Dilution Factor: 1		Analysis Time...: 19:46	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEP1AL
		Dilution Factor: 1		Analysis Time...: 19:46	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	

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000062

HALEY & ALDRICH INC

Client Sample ID: SP_19_M

TOTAL Metals

Lot-Sample #....: E1J010219-013

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Cobalt	11.8	5.0	mg/kg	SW846 6010B	10/02/01	ELEEP1AM	
		Dilution Factor: 1		Analysis Time...: 19:46		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Copper	21.1	2.5	mg/kg	SW846 6010B	10/02/01	ELEEP1AN	
		Dilution Factor: 1		Analysis Time...: 19:46		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.40	
Molybdenum	0.33 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEEP1AP	
		Dilution Factor: 1		Analysis Time...: 19:46		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Nickel	22.1	4.0	mg/kg	SW846 6010B	10/02/01	ELEEP1AQ	
		Dilution Factor: 1		Analysis Time...: 19:46		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Thallium	1.0	1.0	mg/kg	SW846 6010B	10/02/01	ELEEP1AR	
		Dilution Factor: 1		Analysis Time...: 19:46		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.80	
Vanadium	61.3	5.0	mg/kg	SW846 6010B	10/02/01	ELEEP1AT	
		Dilution Factor: 1		Analysis Time...: 19:46		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Zinc	67.0	2.0	mg/kg	SW846 6010B	10/02/01	ELEEP1AU	
		Dilution Factor: 1		Analysis Time...: 19:46		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 1.0	
Prep Batch #....:	1275237						
Mercury	0.050 B	0.10	mg/kg	SW846 7471A	10/02/01	ELEEP1AV	
		Dilution Factor: 1		Analysis Time...: 14:21		Analyst ID.....: 0000230	
		Instrument ID...: M04		MS Run #.....: 1275103		MDL.....: 0.020	

NOTE(S) :

B Estimated result. Result is less than RL.

000063

HALEY & ALDRICH INC

Client Sample ID: SP_19_N

TOTAL Metals

Lot-Sample #....: E1J010219-014				Matrix.....: SOLID
Date Sampled....: 10/01/01 15:00 Date Received...: 10/01/01 17:00				
PARAMETER	RESULT	REPORTING LIMIT	UNITS	PREPARATION- ANALYSIS DATE
METHOD				WORK ORDER #
Prep Batch #....:	1275230			
Aluminum	18000	20.0	mg/kg	SW846 6010B 10/02/01 ELEEQ1AA
		Dilution Factor: 1		Analysis Time...: 19:55 Analyst ID.....: 021088
		Instrument ID...: M01		MS Run #.....: 1275100 MDL.....: 8.0
Arsenic	5.4	1.0	mg/kg	SW846 6010B 10/02/01 ELEEQ1AC
		Dilution Factor: 1		Analysis Time...: 19:55 Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100 MDL.....: 0.40
Antimony	ND	6.0	mg/kg	SW846 6010B 10/02/01 ELEEQ1AD
		Dilution Factor: 1		Analysis Time...: 19:55 Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100 MDL.....: 0.60
Barium	142	2.0	mg/kg	SW846 6010B 10/02/01 ELEEQ1AE
		Dilution Factor: 1		Analysis Time...: 19:55 Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100 MDL.....: 0.10
Cadmium	1.6	0.50	mg/kg	SW846 6010B 10/02/01 ELEEQ1AF
		Dilution Factor: 1		Analysis Time...: 19:55 Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100 MDL.....: 0.060
Chromium	34.0	1.0	mg/kg	SW846 6010B 10/02/01 ELEEQ1AG
		Dilution Factor: 1		Analysis Time...: 19:55 Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100 MDL.....: 0.10
Beryllium	0.50	0.50	mg/kg	SW846 6010B 10/02/01 ELEEQ1AH
		Dilution Factor: 1		Analysis Time...: 19:55 Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100 MDL.....: 0.050
Lead	5.7	0.50	mg/kg	SW846 6010B 10/02/01 ELEEQ1AJ
		Dilution Factor: 1		Analysis Time...: 19:55 Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100 MDL.....: 0.30
Selenium	ND	0.50	mg/kg	SW846 6010B 10/02/01 ELEEQ1AK
		Dilution Factor: 1		Analysis Time...: 19:55 Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100 MDL.....: 0.40
Silver	ND	1.0	mg/kg	SW846 6010B 10/02/01 ELEEQ1AL
		Dilution Factor: 1		Analysis Time...: 19:55 Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100 MDL.....: 0.10

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000064

HALEY & ALDRICH INC

Client Sample ID: SP_19_N

TOTAL Metals

Lot-Sample #....: E1J010219-014

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Cobalt	9.4	5.0	mg/kg	SW846 6010B	10/02/01	ELEEQ1AM	
		Dilution Factor: 1		Analysis Time...: 19:55		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.10
Copper	25.1	2.5	mg/kg	SW846 6010B	10/02/01	ELEEQ1AN	
		Dilution Factor: 1		Analysis Time...: 19:55		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.40
Molybdenum	3.1 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEEQ1AP	
		Dilution Factor: 1		Analysis Time...: 19:55		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.30
Nickel	28.3	4.0	mg/kg	SW846 6010B	10/02/01	ELEEQ1AQ	
		Dilution Factor: 1		Analysis Time...: 19:55		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.30
Thallium	0.87 B	1.0	mg/kg	SW846 6010B	10/02/01	ELEEQ1AR	
		Dilution Factor: 1		Analysis Time...: 19:55		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.80
Vanadium	73.7	5.0	mg/kg	SW846 6010B	10/02/01	ELEEQ1AT	
		Dilution Factor: 1		Analysis Time...: 19:55		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	0.10
Zinc	64.2	2.0	mg/kg	SW846 6010B	10/02/01	ELEEQ1AU	
		Dilution Factor: 1		Analysis Time...: 19:55		Analyst ID.....:	0210880
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....:	1.0
Prep Batch #....:	1275237						
Mercury	0.032 B	0.10	mg/kg	SW846 7471A	10/02/01	ELEEQ1AV	
		Dilution Factor: 1		Analysis Time...: 14:23		Analyst ID.....:	0000230
		Instrument ID...: M04		MS Run #.....: 1275103		MDL.....:	0.020

NOTE(S) :

B Estimated result. Result is less than RL.

000065

HALEY & ALDRICH INC

Client Sample ID: SP_19_O

TOTAL Metals

Lot-Sample #....:	E1J010219-015			Matrix.....:	SOLID
Date Sampled....:	10/01/01 15:00			Date Received...:	10/01/01 17:00
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE
Prep Batch #....:	1275230				WORK ORDER #
Aluminum	18000	20.0	mg/kg	SW846 6010B	10/02/01
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 021088
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0
Arsenic	3.7	1.0	mg/kg	SW846 6010B	10/02/01
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60
Barium	157	2.0	mg/kg	SW846 6010B	10/02/01
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/02/01
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060
Chromium	25.2	1.0	mg/kg	SW846 6010B	10/02/01
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10
Beryllium	0.52	0.50	mg/kg	SW846 6010B	10/02/01
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050
Lead	6.2	0.50	mg/kg	SW846 6010B	10/02/01
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30
Selenium	0.42 B	0.50	mg/kg	SW846 6010B	10/02/01
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10

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000066

HALEY & ALDRICH INC

Client Sample ID: SP_19_O

TOTAL Metals

Lot-Sample #....: E1J010219-015

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Cobalt	11.4	5.0	mg/kg	SW846 6010B	10/02/01	ELEER1AM	
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Copper	21.4	2.5	mg/kg	SW846 6010B	10/02/01	ELEER1AN	
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40		
Molybdenum	0.81 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEER1AP	
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30		
Nickel	18.9	4.0	mg/kg	SW846 6010B	10/02/01	ELEER1AQ	
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30		
Thallium	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEER1AR	
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.80		
Vanadium	46.9	5.0	mg/kg	SW846 6010B	10/02/01	ELEER1AT	
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Zinc	61.3	2.0	mg/kg	SW846 6010B	10/02/01	ELEER1AU	
		Dilution Factor: 1		Analysis Time...: 20:18	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 1.0		
Prep Batch #....: 1275237							
Mercury	ND	0.10	mg/kg	SW846 7471A	10/02/01	ELEER1AV	
		Dilution Factor: 1		Analysis Time...: 14:25	Analyst ID.....: 0000230		
		Instrument ID...: M04		MS Run #.....: 1275103	MDL.....: 0.020		

NOTE(S) :

B Estimated result. Result is less than RL.

000067

HALEY & ALDRICH INC

Client Sample ID: SP_19_P

TOTAL Metals

Lot-Sample #....: E1J010219-016

Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....:	1275230					
Aluminum	24200	20.0	mg/kg	SW846 6010B	10/02/01	ELEET1AA
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0	
Arsenic	4.7	1.0	mg/kg	SW846 6010B	10/02/01	ELEET1AC
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEET1AD
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60	
Barium	203	2.0	mg/kg	SW846 6010B	10/02/01	ELEET1AE
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEET1AF
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060	
Chromium	29.1	1.0	mg/kg	SW846 6010B	10/02/01	ELEET1AG
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Beryllium	0.69	0.50	mg/kg	SW846 6010B	10/02/01	ELEET1AH
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050	
Lead	6.6	0.50	mg/kg	SW846 6010B	10/02/01	ELEET1AJ
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEET1AK
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEET1AL
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	

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000068

HALEY & ALDRICH INC

Client Sample ID: SP_19_P

TOTAL Metals

Lot-Sample #....: E1J010219-016

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Cobalt	12.2	5.0	mg/kg	SW846 6010B	10/02/01	ELEET1AM
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Copper	28.5	2.5	mg/kg	SW846 6010B	10/02/01	ELEET1AM
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Molybdenum	0.68 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEET1AP
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Nickel	21.4	4.0	mg/kg	SW846 6010B	10/02/01	ELEET1AQ
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEET1AR
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.80	
Vanadium	61.4	5.0	mg/kg	SW846 6010B	10/02/01	ELEET1AT
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Zinc	68.1	2.0	mg/kg	SW846 6010B	10/02/01	ELEET1AU
		Dilution Factor: 1		Analysis Time...: 20:26	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 1.0	
Prep Batch #....:	1275237					
Mercury	0.033 B	0.10	mg/kg	SW846 7471A	10/02/01	ELEET1AV
		Dilution Factor: 1		Analysis Time...: 14:27	Analyst ID.....: 0000230	
		Instrument ID...: M04		MS Run #.....: 1275103	MDL.....: 0.020	

NOTE(S) :

B Estimated result. Result is less than RL.

000069

HALEY & ALDRICH INC

Client Sample ID: SP_19_Q

TOTAL Metals

Lot-Sample #....: E1J010219-017 Matrix.....: SOLID
 Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 1275230						
Aluminum	18300	20.0	mg/kg	SW846 6010B	10/02/01	ELEEV1AA
		Dilution Factor: 1		Analysis Time...: 20:34	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0	
Arsenic	10.1	1.0	mg/kg	SW846 6010B	10/02/01	ELEEV1AC
		Dilution Factor: 1		Analysis Time...: 20:34	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEEV1AD
		Dilution Factor: 1		Analysis Time...: 20:34	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60	
Barium	149	2.0	mg/kg	SW846 6010B	10/02/01	ELEEV1AE
		Dilution Factor: 1		Analysis Time...: 20:34	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEV1AF
		Dilution Factor: 1		Analysis Time...: 20:34	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060	
Chromium	24.9	1.0	mg/kg	SW846 6010B	10/02/01	ELEEV1AG
		Dilution Factor: 1		Analysis Time...: 20:34	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	
Beryllium	0.54	0.50	mg/kg	SW846 6010B	10/02/01	ELEEV1AH
		Dilution Factor: 1		Analysis Time...: 20:34	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050	
Lead	8.0	0.50	mg/kg	SW846 6010B	10/02/01	ELEEV1AJ
		Dilution Factor: 1		Analysis Time...: 20:34	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30	
Selenium	0.56	0.50	mg/kg	SW846 6010B	10/02/01	ELEEV1AK
		Dilution Factor: 1		Analysis Time...: 20:34	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEV1AL
		Dilution Factor: 1		Analysis Time...: 20:34	Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10	

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000070

HALEY & ALDRICH INC

Client Sample ID: SP_19_Q

TOTAL Metals

Lot-Sample #....: E1J010219-017

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ORDER #
		LIMIT	UNITS					
Cobalt	11.4	5.0	mg/kg		SW846 6010B	10/02/01	ELEEV1AM	
		Dilution Factor: 1			Analysis Time...: 20:34		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100		MDL.....: 0.10	
Copper	20.6	2.5	mg/kg		SW846 6010B	10/02/01	ELEEV1AN	
		Dilution Factor: 1			Analysis Time...: 20:34		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100		MDL.....: 0.40	
Molybdenum	0.82 B	4.0	mg/kg		SW846 6010B	10/02/01	ELEEV1AP	
		Dilution Factor: 1			Analysis Time...: 20:34		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100		MDL.....: 0.30	
Nickel	17.4	4.0	mg/kg		SW846 6010B	10/02/01	ELEEV1AQ	
		Dilution Factor: 1			Analysis Time...: 20:34		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100		MDL.....: 0.30	
Thallium	ND	1.0	mg/kg		SW846 6010B	10/02/01	ELEEV1AR	
		Dilution Factor: 1			Analysis Time...: 20:34		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100		MDL.....: 0.80	
Vanadium	50.3	5.0	mg/kg		SW846 6010B	10/02/01	ELEEV1AT	
		Dilution Factor: 1			Analysis Time...: 20:34		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100		MDL.....: 0.10	
Zinc	53.3	2.0	mg/kg		SW846 6010B	10/02/01	ELEEV1AU	
		Dilution Factor: 1			Analysis Time...: 20:34		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100		MDL.....: 1.0	
Prep Batch #....:	1275237							
Mercury	0.029 B	0.10	mg/kg		SW846 7471A	10/02/01	ELEEV1AV	
		Dilution Factor: 1			Analysis Time...: 14:28		Analyst ID.....: 0000230	
		Instrument ID...: M04			MS Run #.....: 1275103		MDL.....: 0.020	

NOTE (S) :

B Estimated result. Result is less than RL.

000071

HALEY & ALDRICH INC

Client Sample ID: SP_19_R

TOTAL Metals

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Prep Batch #....:	1275230						
Aluminum	14100	20.0	mg/kg	SW846 6010B	10/02/01	ELEEW1AA	
		Dilution Factor: 1		Analysis Time...: 20:43	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0		
Arsenic	32.8	1.0	mg/kg	SW846 6010B	10/02/01	ELEEW1AC	
		Dilution Factor: 1		Analysis Time...: 20:43	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40		
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEEW1AD	
		Dilution Factor: 1		Analysis Time...: 20:43	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60		
Barium	118	2.0	mg/kg	SW846 6010B	10/02/01	ELEEW1AE	
		Dilution Factor: 1		Analysis Time...: 20:43	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Cadmium	0.28 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEEW1AF	
		Dilution Factor: 1		Analysis Time...: 20:43	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060		
Chromium	20.1	1.0	mg/kg	SW846 6010B	10/02/01	ELEEW1AG	
		Dilution Factor: 1		Analysis Time...: 20:43	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Beryllium	0.41 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEEW1AH	
		Dilution Factor: 1		Analysis Time...: 20:43	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050		
Lead	8.0	0.50	mg/kg	SW846 6010B	10/02/01	ELEEW1AJ	
		Dilution Factor: 1		Analysis Time...: 20:43	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30		
Selenium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEEW1AK	
		Dilution Factor: 1		Analysis Time...: 20:43	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40		
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEW1AL	
		Dilution Factor: 1		Analysis Time...: 20:43	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		

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000072

HALEY & ALDRICH INC

Client Sample ID: SP_19_R

TOTAL Metals

Lot-Sample #....: E1J010219-018

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS				
Cobalt	10.5	5.0	mg/kg		SW846 6010B	10/02/01	ELEEW1AM
		Dilution Factor: 1			Analysis Time...: 20:43	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.10	
Copper	21.6	2.5	mg/kg		SW846 6010B	10/02/01	ELEEW1AN
		Dilution Factor: 1			Analysis Time...: 20:43	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.40	
Molybdenum	1.3 B	4.0	mg/kg		SW846 6010B	10/02/01	ELEEW1AP
		Dilution Factor: 1			Analysis Time...: 20:43	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.30	
Nickel	16.7	4.0	mg/kg		SW846 6010B	10/02/01	ELEEW1AQ
		Dilution Factor: 1			Analysis Time...: 20:43	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg		SW846 6010B	10/02/01	ELEEW1AR
		Dilution Factor: 1			Analysis Time...: 20:43	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.80	
Vanadium	49.0	5.0	mg/kg		SW846 6010B	10/02/01	ELEEW1AT
		Dilution Factor: 1			Analysis Time...: 20:43	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 0.10	
Zinc	45.6	2.0	mg/kg		SW846 6010B	10/02/01	ELEEW1AU
		Dilution Factor: 1			Analysis Time...: 20:43	Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1275100	MDL.....: 1.0	
Prep Batch #....: 1275237							
Mercury	ND	0.10	mg/kg		SW846 7471A	10/02/01	ELEEW1AV
		Dilution Factor: 1			Analysis Time...: 14:30	Analyst ID.....: 0000230	
		Instrument ID...: M04			MS Run #.....: 1275103	MDL.....: 0.020	

NOTE(S) :

B Estimated result. Result is less than RL.

000073

HALEY & ALDRICH INC

Client Sample ID: SP_19_S

TOTAL Metals

Lot-Sample #....:	E1J010219-019	Matrix.....:	SOLID
Date Sampled....:	10/01/01 15:00	Date Received...:	10/01/01 17:00
PARAMETER	RESULT	REPORTING LIMIT	UNITS
METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #	
Prep Batch #....:	1275230		
Aluminum	21500	20.0	mg/kg
	Dilution Factor: 1	SW846 6010B	10/02/01
	Instrument ID...: M01	Analysis Time...: 20:51	Analyst ID.....: 0210880
	MS Run #.....: 1275100	MDL.....: 8.0	
Arsenic	9.7	1.0	mg/kg
	Dilution Factor: 1	SW846 6010B	10/02/01
	Instrument ID...: M01	Analysis Time...: 20:51	Analyst ID.....: 0210880
	MS Run #.....: 1275100	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg
	Dilution Factor: 1	SW846 6010B	10/02/01
	Instrument ID...: M01	Analysis Time...: 20:51	Analyst ID.....: 0210880
	MS Run #.....: 1275100	MDL.....: 0.60	
Barium	146	2.0	mg/kg
	Dilution Factor: 1	SW846 6010B	10/02/01
	Instrument ID...: M01	Analysis Time...: 20:51	Analyst ID.....: 0210880
	MS Run #.....: 1275100	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg
	Dilution Factor: 1	SW846 6010B	10/02/01
	Instrument ID...: M01	Analysis Time...: 20:51	Analyst ID.....: 0210880
	MS Run #.....: 1275100	MDL.....: 0.060	
Chromium	27.6	1.0	mg/kg
	Dilution Factor: 1	SW846 6010B	10/02/01
	Instrument ID...: M01	Analysis Time...: 20:51	Analyst ID.....: 0210880
	MS Run #.....: 1275100	MDL.....: 0.10	
Beryllium	0.60	0.50	mg/kg
	Dilution Factor: 1	SW846 6010B	10/02/01
	Instrument ID...: M01	Analysis Time...: 20:51	Analyst ID.....: 0210880
	MS Run #.....: 1275100	MDL.....: 0.050	
Lead	7.8	0.50	mg/kg
	Dilution Factor: 1	SW846 6010B	10/02/01
	Instrument ID...: M01	Analysis Time...: 20:51	Analyst ID.....: 0210880
	MS Run #.....: 1275100	MDL.....: 0.30	
Selenium	0.40 B	0.50	mg/kg
	Dilution Factor: 1	SW846 6010B	10/02/01
	Instrument ID...: M01	Analysis Time...: 20:51	Analyst ID.....: 0210880
	MS Run #.....: 1275100	MDL.....: 0.40	
Silver	ND	1.0	mg/kg
	Dilution Factor: 1	SW846 6010B	10/02/01
	Instrument ID...: M01	Analysis Time...: 20:51	Analyst ID.....: 0210880
	MS Run #.....: 1275100	MDL.....: 0.10	

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000074

HALEY & ALDRICH INC

Client Sample ID: SP_19_S

TOTAL Metals

Lot-Sample #....: E1J010219-019

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Cobalt	12.7	5.0	mg/kg	SW846 6010B	10/02/01	ELEEX1AM	
		Dilution Factor: 1		Analysis Time...: 20:51		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Copper	20.9	2.5	mg/kg	SW846 6010B	10/02/01	ELEEX1AN	
		Dilution Factor: 1		Analysis Time...: 20:51		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.40	
Molybdenum	1.6 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEEX1AP	
		Dilution Factor: 1		Analysis Time...: 20:51		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Nickel	19.4	4.0	mg/kg	SW846 6010B	10/02/01	ELEEX1AQ	
		Dilution Factor: 1		Analysis Time...: 20:51		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEEX1AR	
		Dilution Factor: 1		Analysis Time...: 20:51		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.80	
Vanadium	56.0	5.0	mg/kg	SW846 6010B	10/02/01	ELEEX1AT	
		Dilution Factor: 1		Analysis Time...: 20:51		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Zinc	61.0	2.0	mg/kg	SW846 6010B	10/02/01	ELEEX1AU	
		Dilution Factor: 1		Analysis Time...: 20:51		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 1.0	
Prep Batch #....: 1275237							
Mercury	ND	0.10	mg/kg	SW846 7471A	10/02/01	ELEEX1AV	
		Dilution Factor: 1		Analysis Time...: 14:32		Analyst ID.....: 0000230	
		Instrument ID...: M04		MS Run #.....: 1275103		MDL.....: 0.020	

NOTE(S) :

B Estimated result. Result is less than RL.

000075

HALEY & ALDRICH INC

Client Sample ID: SP_19_T

TOTAL Metals

Lot-Sample #....: E1J010219-020

Matrix.....: SOLID

Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Prep Batch #....: 1275230							
Aluminum	16500	20.0	mg/kg	SW846 6010B	10/02/01	ELEE01AA	
		Dilution Factor: 1		Analysis Time...: 20:59	Analyst ID.....: 021088		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 8.0		
Arsenic	15.4	1.0	mg/kg	SW846 6010B	10/02/01	ELEE01AC	
		Dilution Factor: 1		Analysis Time...: 20:59	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40		
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEE01AD	
		Dilution Factor: 1		Analysis Time...: 20:59	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.60		
Barium	168	2.0	mg/kg	SW846 6010B	10/02/01	ELEE01AE	
		Dilution Factor: 1		Analysis Time...: 20:59	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Cadmium	0.25 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEE01AF	
		Dilution Factor: 1		Analysis Time...: 20:59	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.060		
Chromium	24.3	1.0	mg/kg	SW846 6010B	10/02/01	ELEE01AG	
		Dilution Factor: 1		Analysis Time...: 20:59	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		
Beryllium	0.48 B	0.50	mg/kg	SW846 6010B	10/02/01	ELEE01AH	
		Dilution Factor: 1		Analysis Time...: 20:59	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.050		
Lead	7.9	0.50	mg/kg	SW846 6010B	10/02/01	ELEE01AJ	
		Dilution Factor: 1		Analysis Time...: 20:59	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.30		
Selenium	0.57	0.50	mg/kg	SW846 6010B	10/02/01	ELEE01AK	
		Dilution Factor: 1		Analysis Time...: 20:59	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.40		
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEE01AL	
		Dilution Factor: 1		Analysis Time...: 20:59	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1275100	MDL.....: 0.10		

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000076

HALEY & ALDRICH INC

Client Sample ID: SP_19_T

TOTAL Metals

Lot-Sample #....: E1J010219-020

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Cobalt	9.9	5.0	mg/kg	SW846 6010B	10/02/01	ELEE01AM	
		Dilution Factor: 1		Analysis Time...: 20:59		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Copper	19.1	2.5	mg/kg	SW846 6010B	10/02/01	ELEE01AN	
		Dilution Factor: 1		Analysis Time...: 20:59		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.40	
Molybdenum	2.1 B	4.0	mg/kg	SW846 6010B	10/02/01	ELEE01AP	
		Dilution Factor: 1		Analysis Time...: 20:59		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Nickel	17.6	4.0	mg/kg	SW846 6010B	10/02/01	ELEE01AQ	
		Dilution Factor: 1		Analysis Time...: 20:59		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.30	
Thallium	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEE01AR	
		Dilution Factor: 1		Analysis Time...: 20:59		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.80	
Vanadium	53.1	5.0	mg/kg	SW846 6010B	10/02/01	ELEE01AT	
		Dilution Factor: 1		Analysis Time...: 20:59		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 0.10	
Zinc	53.1	2.0	mg/kg	SW846 6010B	10/02/01	ELEE01AU	
		Dilution Factor: 1		Analysis Time...: 20:59		Analyst ID.....: 0210880	
		Instrument ID...: M01		MS Run #.....: 1275100		MDL.....: 1.0	
Prep Batch #....: 1275237							
Mercury	ND	0.10	mg/kg	SW846 7471A	10/02/01	ELEE01AV	
		Dilution Factor: 1		Analysis Time...: 14:33		Analyst ID.....: 0000230	
		Instrument ID...: M04		MS Run #.....: 1275103		MDL.....: 0.020	

NOTE(S) :

B Estimated result. Result is less than RL.

000077

SEVERN
TRENT
SERVICES

QA/QC

000078

QC DATA ASSOCIATION SUMMARY

E1J010219

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
002	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
003	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
004	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
005	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
006	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
007	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
008	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
009	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
010	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
011	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209

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000079

QC DATA ASSOCIATION SUMMARY

E1J010219

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
012	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
013	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
014	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
015	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
016	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
017	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
018	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
019	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209
020	SOLID	SW846 7471A		1275237	1275103
	SOLID	SW846 6010B		1275230	1275100
	SOLID	MCAWW 160.3 MOD		1275385	1275209

000080

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: E1J010219

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
MB Lot-Sample #: E1J020000-230 Prep Batch #: 1275230						
Aluminum	ND	20.0	mg/kg	SW846 6010B	10/02/01	ELEP71AA
		Dilution Factor: 1				
		Analysis Time...: 17:06		Analyst ID.....: 021088	Instrument ID...: M01	
Arsenic	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEP71AC
		Dilution Factor: 1				
		Analysis Time...: 17:06		Analyst ID.....: 021088	Instrument ID...: M01	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELEP71AD
		Dilution Factor: 1				
		Analysis Time...: 17:06		Analyst ID.....: 021088	Instrument ID...: M01	
Barium	ND	2.0	mg/kg	SW846 6010B	10/02/01	ELEP71AE
		Dilution Factor: 1				
		Analysis Time...: 17:06		Analyst ID.....: 021088	Instrument ID...: M01	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEP71AF
		Dilution Factor: 1				
		Analysis Time...: 17:06		Analyst ID.....: 021088	Instrument ID...: M01	
Chromium	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEP71AG
		Dilution Factor: 1				
		Analysis Time...: 17:06		Analyst ID.....: 021088	Instrument ID...: M01	
Beryllium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEP71AH
		Dilution Factor: 1				
		Analysis Time...: 17:06		Analyst ID.....: 021088	Instrument ID...: M01	
Lead	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEP71AJ
		Dilution Factor: 1				
		Analysis Time...: 17:06		Analyst ID.....: 021088	Instrument ID...: M01	
Selenium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELEP71AK
		Dilution Factor: 1				
		Analysis Time...: 17:06		Analyst ID.....: 021088	Instrument ID...: M01	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELEP71AL
		Dilution Factor: 1				
		Analysis Time...: 17:06		Analyst ID.....: 021088	Instrument ID...: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B	10/02/01	ELEP71AM
		Dilution Factor: 1				
		Analysis Time...: 17:06		Analyst ID.....: 021088	Instrument ID...: M01	

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000081

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: E1J010219

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Copper	ND	2.5	mg/kg	SW846 6010B		10/02/01	ELEP71AN
		Dilution Factor: 1					
		Analysis Time...: 17:06		Analyst ID.....: 021088		Instrument ID...: M01	
Molybdenum	ND	4.0	mg/kg	SW846 6010B		10/02/01	ELEP71AP
		Dilution Factor: 1					
		Analysis Time...: 17:06		Analyst ID.....: 021088		Instrument ID...: M01	
Nickel	ND	4.0	mg/kg	SW846 6010B		10/02/01	ELEP71AQ
		Dilution Factor: 1					
		Analysis Time...: 17:06		Analyst ID.....: 021088		Instrument ID...: M01	
Thallium	ND	1.0	mg/kg	SW846 6010B		10/02/01	ELEP71AR
		Dilution Factor: 1					
		Analysis Time...: 17:06		Analyst ID.....: 021088		Instrument ID...: M01	
Vanadium	ND	5.0	mg/kg	SW846 6010B		10/02/01	ELEP71AT
		Dilution Factor: 1					
		Analysis Time...: 17:06		Analyst ID.....: 021088		Instrument ID...: M01	
Zinc	ND	2.0	mg/kg	SW846 6010B		10/02/01	ELEP71AU
		Dilution Factor: 1					
		Analysis Time...: 17:06		Analyst ID.....: 021088		Instrument ID...: M01	

MB Lot-Sample #: E1J020000-237 Prep Batch #....: 1275237

Mercury	ND	0.10	mg/kg	SW846 7471A	10/02/01	ELEQ21AA
		Dilution Factor: 1				
		Analysis Time...: 13:47		Analyst ID.....: 000023		Instrument ID...: M04

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000082

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J010219

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	PREPARATION- ANALYSIS METHOD	WORK ORDER #
LCS Lot-Sample#: E1J020000-230 Prep Batch #...: 1275230						
Aluminum	200	182	mg/kg	91	SW846 6010B	10/02/01 ELEP71AV
			Dilution Factor: 1			
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01
Arsenic	200	190	mg/kg	95	SW846 6010B	10/02/01 ELEP71AW
			Dilution Factor: 1			
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01
Antimony	50.0	42.9	mg/kg	86	SW846 6010B	10/02/01 ELEP71AX
			Dilution Factor: 1			
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01
Barium	200	207	mg/kg	104	SW846 6010B	10/02/01 ELEP71A0
			Dilution Factor: 1			
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01
Cadmium	5.00	5.07	mg/kg	101	SW846 6010B	10/02/01 ELEP71A1
			Dilution Factor: 1			
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01
Chromium	20.0	20.7	mg/kg	103	SW846 6010B	10/02/01 ELEP71A2
			Dilution Factor: 1			
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01
Beryllium	5.00	5.10	mg/kg	102	SW846 6010B	10/02/01 ELEP71A3
			Dilution Factor: 1			
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01
Lead	50.0	47.1	mg/kg	94	SW846 6010B	10/02/01 ELEP71A4
			Dilution Factor: 1			
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01
Selenium	200	182	mg/kg	91	SW846 6010B	10/02/01 ELEP71A5
			Dilution Factor: 1			
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01
Silver	5.00	4.84	mg/kg	97	SW846 6010B	10/02/01 ELEP71A6
			Dilution Factor: 1			
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01

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000083

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J010219

Matrix.....: SOLID

PARAMETER	SPIKE	MEASURED	UNITS	PERCNT	METHOD	PREPARATION-	WORK	ORDER #
	AMOUNT	AMOUNT		RECVRY		ANALYSIS DATE		
Cobalt	50.0	49.8	mg/kg	100	SW846 6010B	10/02/01		ELEP71A7
			Dilution Factor: 1					
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01		
Copper	25.0	24.2	mg/kg	97	SW846 6010B	10/02/01		ELEP71A8
			Dilution Factor: 1					
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01		
Molybdenum	100	98.4	mg/kg	98	SW846 6010B	10/02/01		ELEP71A9
			Dilution Factor: 1					
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01		
Nickel	50.0	52.1	mg/kg	104	SW846 6010B	10/02/01		ELEP71CA
			Dilution Factor: 1					
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01		
Thallium	200	182	mg/kg	91	SW846 6010B	10/02/01		ELEP71CC
			Dilution Factor: 1					
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01		
Vanadium	50.0	50.5	mg/kg	101	SW846 6010B	10/02/01		ELEP71CD
			Dilution Factor: 1					
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01		
Zinc	50.0	50.8	mg/kg	102	SW846 6010B	10/02/01		ELEP71CE
			Dilution Factor: 1					
			Analysis Time...: 17:12		Analyst ID.....: 021088	Instrument ID...: M01		
LCS Lot-Sample#:	E1J020000-237		Prep Batch #....:	1275237				
Mercury	0.833	0.854	mg/kg	102	SW846 7471A	10/02/01		ELEQ21AC
			Dilution Factor: 1					
			Analysis Time...: 13:49		Analyst ID.....: 000023	Instrument ID...: M04		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000084

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1J010219 **Matrix.....: SOLID**

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: E1J020000-230 Prep Batch #....: 1275230					
Aluminum	91	(70 - 115)	SW846 6010B	10/02/01	ELEP71AV
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088		Instrument ID...: M01
Arsenic	95	(75 - 115)	SW846 6010B	10/02/01	ELEP71AW
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088		Instrument ID...: M01
Antimony	86	(75 - 115)	SW846 6010B	10/02/01	ELEP71AX
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088		Instrument ID...: M01
Barium	104	(80 - 120)	SW846 6010B	10/02/01	ELEP71AO
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088		Instrument ID...: M01
Cadmium	101	(80 - 120)	SW846 6010B	10/02/01	ELEP71A1
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088		Instrument ID...: M01
Chromium	103	(85 - 120)	SW846 6010B	10/02/01	ELEP71A2
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088		Instrument ID...: M01
Beryllium	102	(80 - 120)	SW846 6010B	10/02/01	ELEP71A3
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088		Instrument ID...: M01
Lead	94	(80 - 120)	SW846 6010B	10/02/01	ELEP71A4
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088		Instrument ID...: M01
Selenium	91	(70 - 115)	SW846 6010B	10/02/01	ELEP71A5
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088		Instrument ID...: M01
Silver	97	(80 - 120)	SW846 6010B	10/02/01	ELEP71A6
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088		Instrument ID...: M01

(Continued on next page)

000085

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1J010219

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS (80 - 120)	METHOD SW846 6010B	PREPARATION-	
				ANALYSIS DATE	WORK ORDER #
Cobalt	100	(80 - 120)	SW846 6010B	10/02/01	ELEP71A7
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088	Instrument ID...: M01	
Copper	97	(80 - 120)	SW846 6010B	10/02/01	ELEP71A8
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088	Instrument ID...: M01	
Molybdenum	98	(80 - 120)	SW846 6010B	10/02/01	ELEP71A9
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088	Instrument ID...: M01	
Nickel	104	(80 - 120)	SW846 6010B	10/02/01	ELEP71CA
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088	Instrument ID...: M01	
Thallium	91	(75 - 125)	SW846 6010B	10/02/01	ELEP71CC
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088	Instrument ID...: M01	
Vanadium	101	(80 - 120)	SW846 6010B	10/02/01	ELEP71CD
		Dilution Factor: 1			
		Analysis Time...: 17:12	Analyst ID.....: 021088	Instrument ID...: M01	
Zinc	102	(80 - 120)	SW846 6010B	10/02/01	ELEP71CE
		Dilution Factor: 1			
		Analysis Time...: 13:49	Analyst ID.....: 000023	Instrument ID...: M04	
LCS Lot-Sample#:	E1J020000-237	Prep Batch #....:	1275237		
Mercury	102	(85 - 115)	SW846 7471A	10/02/01	ELEQ21AC
		Dilution Factor: 1			
		Analysis Time...: 13:49	Analyst ID.....: 000023	Instrument ID...: M04	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000086

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J010219

Matrix.....: SOLID

Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

<u>SAMPLE PARAMETER</u>	<u>AMOUNT</u>	<u>AMT</u>	<u>SPIKE MEASURED</u>	<u>UNITS</u>	<u>PERCNT RECVRY</u>	<u>RPD</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
MS Lot-Sample #: E1J010219-001 Prep Batch #....: 1275230									
Aluminum									
19700	200	25100	NC	mg/kg			SW846 6010B	10/02/01	ELEEA1AW
19700	200	22400	NC	mg/kg			SW846 6010B	10/02/01	ELEEA1AX
Dilution Factor: 1									
Analysis Time...: 17:37 Instrument ID...: M01									
MS Run #.....: 1275100									
Arsenic									
16.1	200	184		mg/kg	84		SW846 6010B	10/02/01	ELEEA1A0
16.1	200	194		mg/kg	89	5.0	SW846 6010B	10/02/01	ELEEA1A1
Dilution Factor: 1									
Analysis Time...: 17:37 Instrument ID...: M01									
MS Run #.....: 1275100									
Antimony									
ND	50.0	11.8	N	mg/kg	24		SW846 6010B	10/02/01	ELEEA1A2
ND	50.0	11.2	N	mg/kg	22	5.8	SW846 6010B	10/02/01	ELEEA1A3
Dilution Factor: 1									
Analysis Time...: 17:37 Instrument ID...: M01									
MS Run #.....: 1275100									
Barium									
124	200	333		mg/kg	105		SW846 6010B	10/02/01	ELEEA1A4
124	200	326		mg/kg	101	2.2	SW846 6010B	10/02/01	ELEEA1A5
Dilution Factor: 1									
Analysis Time...: 17:37 Instrument ID...: M01									
MS Run #.....: 1275100									
Cadmium									
ND	5.00	4.21		mg/kg	84		SW846 6010B	10/02/01	ELEEA1A6
ND	5.00	4.36		mg/kg	87	3.6	SW846 6010B	10/02/01	ELEEA1A7
Dilution Factor: 1									
Analysis Time...: 17:37 Instrument ID...: M01									
MS Run #.....: 1275100									
Chromium									
23.3	20.0	47.6	N	mg/kg	121		SW846 6010B	10/02/01	ELEEA1A8
23.3	20.0	45.8		mg/kg	112	4.0	SW846 6010B	10/02/01	ELEEA1A9
Dilution Factor: 1									
Analysis Time...: 17:37 Instrument ID...: M01									
MS Run #.....: 1275100									

(Continued on next page)

000087

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J010219

Matrix.....: SOLID

Date Sampled....: 10/01/01 15:00 Date Received...: 10/01/01 17:00

PARAMETER	SAMPLE	SPIKE	MEASURED	PERCNT			PREPARATION- ANALYSIS DATE	WORK ORDER #
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD	
Beryllium								
	0.60	5.00	5.57	mg/kg	99		SW846 6010B	10/02/01 ELEEA1CA
	0.60	5.00	5.50	mg/kg	98	1.3	SW846 6010B	10/02/01 ELEEA1CC
	Dilution Factor: 1							
	Analysis Time...: 17:37 Instrument ID...: M01 Analyst ID.....: 021088							
	MS Run #.....: 1275100							
Lead								
	5.9	50.0	51.5	mg/kg	91		SW846 6010B	10/02/01 ELEEA1CD
	5.9	50.0	52.0	mg/kg	92	0.95	SW846 6010B	10/02/01 ELEEA1CE
	Dilution Factor: 1							
	Analysis Time...: 17:37 Instrument ID...: M01 Analyst ID.....: 021088							
	MS Run #.....: 1275100							
Selenium								
	0.52	200	175	mg/kg	87		SW846 6010B	10/02/01 ELEEA1CF
	0.52	200	173	mg/kg	86	0.80	SW846 6010B	10/02/01 ELEEA1CG
	Dilution Factor: 1							
	Analysis Time...: 17:37 Instrument ID...: M01 Analyst ID.....: 021088							
	MS Run #.....: 1275100							
Silver								
	ND	5.00	4.41	mg/kg	88		SW846 6010B	10/02/01 ELEEA1CH
	ND	5.00	4.45	mg/kg	89	0.90	SW846 6010B	10/02/01 ELEEA1CJ
	Dilution Factor: 1							
	Analysis Time...: 17:37 Instrument ID...: M01 Analyst ID.....: 021088							
	MS Run #.....: 1275100							
Cobalt								
	9.7	50.0	58.6	mg/kg	98		SW846 6010B	10/02/01 ELEEA1CK
	9.7	50.0	58.2	mg/kg	97	0.68	SW846 6010B	10/02/01 ELEEA1CL
	Dilution Factor: 1							
	Analysis Time...: 17:37 Instrument ID...: M01 Analyst ID.....: 021088							
	MS Run #.....: 1275100							
Copper								
	19.1	25.0	45.3	mg/kg	105		SW846 6010B	10/02/01 ELEEA1CM
	19.1	25.0	45.7	mg/kg	107	0.85	SW846 6010B	10/02/01 ELEEA1CN
	Dilution Factor: 1							
	Analysis Time...: 17:37 Instrument ID...: M01 Analyst ID.....: 021088							
	MS Run #.....: 1275100							

(Continued on next page)

000088

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J010219

Matrix.....: SOLID

Date Sampled...: 10/01/01 15:00 **Date Received...:** 10/01/01 17:00

PARAMETER	SAMPLE	SPIKE	MEASURED	UNITS	PERCNT			PREPARATION- ANALYSIS DATE	WORK ORDER #									
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	METHOD											
Molybdenum																		
	0.60	100	84.0	mg/kg	83		SW846 6010B	10/02/01	ELEEA1CP									
	0.60	100	86.6	mg/kg	86	3.0	SW846 6010B	10/02/01	ELEEA1CQ									
	Dilution Factor: 1																	
	Analysis Time...: 17:37 Instrument ID...: M01																	
	MS Run #.....: 1275100																	
Nickel																		
	15.2	50.0	67.1	mg/kg	104		SW846 6010B	10/02/01	ELEEA1CR									
	15.2	50.0	66.2	mg/kg	102	1.4	SW846 6010B	10/02/01	ELEEA1CT									
	Dilution Factor: 1																	
	Analysis Time...: 17:37 Instrument ID...: M01																	
	MS Run #.....: 1275100																	
Thallium																		
	1.0	200	185	mg/kg	92		SW846 6010B	10/02/01	ELEEA1CU									
	1.0	200	185	mg/kg	92	0.17	SW846 6010B	10/02/01	ELEEA1CV									
	Dilution Factor: 1																	
	Analysis Time...: 17:37 Instrument ID...: M01																	
	MS Run #.....: 1275100																	
Vanadium																		
	47.7	50.0	101	mg/kg	108		SW846 6010B	10/02/01	ELEEA1CW									
	47.7	50.0	101	mg/kg	106	0.56	SW846 6010B	10/02/01	ELEEA1CX									
	Dilution Factor: 1																	
	Analysis Time...: 17:37 Instrument ID...: M01																	
	MS Run #.....: 1275100																	
Zinc																		
	58.8	50.0	112	mg/kg	106		SW846 6010B	10/02/01	ELEEA1C0									
	58.8	50.0	115	mg/kg	112	2.9	SW846 6010B	10/02/01	ELEEA1C1									
	Dilution Factor: 1																	
	Analysis Time...: 17:37 Instrument ID...: M01																	
	MS Run #.....: 1275100																	
MS Lot-Sample #: E1J010219-001 Prep Batch #....: 1275237																		
Mercury																		
	0.029	0.167	0.200	mg/kg	103		SW846 7471A	10/02/01	ELEEA1C2									
	0.029	0.167	0.197	mg/kg	101	1.7	SW846 7471A	10/02/01	ELEEA1C3									
	Dilution Factor: 1																	
	Analysis Time...: 13:56 Instrument ID...: M04																	
	MS Run #.....: 1275103																	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

000089

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1J010219

Matrix.....: SOLID

Date Sampled...: 10/01/01 15:00 Date Received..: 10/01/01 17:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E1J010219-001 Prep Batch #....: 1275230							
Aluminum	NC	(70 - 115)		SW846 6010B		10/02/01	ELEEA1AW
	NC	(70 - 115)	(0-25)	SW846 6010B		10/02/01	ELEEA1AX
		Dilution Factor: 1					
		Analysis Time...: 17:37		Instrument ID...: M01			Analyst ID.....: 021088
		MS Run #.....: 1275100					
Arsenic	84	(75 - 115)		SW846 6010B		10/02/01	ELEEA1A0
	89	(75 - 115) 5.0	(0-25)	SW846 6010B		10/02/01	ELEEA1A1
		Dilution Factor: 1					
		Analysis Time...: 17:37		Instrument ID...: M01			Analyst ID.....: 021088
		MS Run #.....: 1275100					
Antimony	24 N	(75 - 115)		SW846 6010B		10/02/01	ELEEA1A2
	22 N	(75 - 115) 5.8	(0-25)	SW846 6010B		10/02/01	ELEEA1A3
		Dilution Factor: 1					
		Analysis Time...: 17:37		Instrument ID...: M01			Analyst ID.....: 021088
		MS Run #.....: 1275100					
Barium	105	(80 - 120)		SW846 6010B		10/02/01	ELEEA1A4
	101	(80 - 120) 2.2	(0-25)	SW846 6010B		10/02/01	ELEEA1A5
		Dilution Factor: 1					
		Analysis Time...: 17:37		Instrument ID...: M01			Analyst ID.....: 021088
		MS Run #.....: 1275100					
Cadmium	84	(80 - 120)		SW846 6010B		10/02/01	ELEEA1A6
	87	(80 - 120) 3.6	(0-25)	SW846 6010B		10/02/01	ELEEA1A7
		Dilution Factor: 1					
		Analysis Time...: 17:37		Instrument ID...: M01			Analyst ID.....: 021088
		MS Run #.....: 1275100					
Chromium	121 N	(85 - 120)		SW846 6010B		10/02/01	ELEEA1A8
	112	(85 - 120) 4.0	(0-25)	SW846 6010B		10/02/01	ELEEA1A9
		Dilution Factor: 1					
		Analysis Time...: 17:37		Instrument ID...: M01			Analyst ID.....: 021088
		MS Run #.....: 1275100					
Beryllium	99	(80 - 120)		SW846 6010B		10/02/01	ELEEA1CA
	98	(80 - 120) 1.3	(0-25)	SW846 6010B		10/02/01	ELEEA1CC
		Dilution Factor: 1					
		Analysis Time...: 17:37		Instrument ID...: M01			Analyst ID.....: 021088
		MS Run #.....: 1275100					

(Continued on next page)

000090

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1J010219

Matrix.....: SOLID

Date Sampled...: 10/01/01 15:00 Date Received..: 10/01/01 17:00

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #
Lead	91	(80 - 120)		SW846 6010B	10/02/01	ELEEA1CD
	92	(80 - 120) 0.95 (0-25)		SW846 6010B	10/02/01	ELEEA1CE
		Dilution Factor: 1				
		Analysis Time...: 17:37		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275100				
Selenium	87	(70 - 115)		SW846 6010B	10/02/01	ELEEA1CF
	86	(70 - 115) 0.80 (0-25)		SW846 6010B	10/02/01	ELEEA1CG
		Dilution Factor: 1				
		Analysis Time...: 17:37		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275100				
Silver	88	(80 - 120)		SW846 6010B	10/02/01	ELEEA1CH
	89	(80 - 120) 0.90 (0-25)		SW846 6010B	10/02/01	ELEEA1CJ
		Dilution Factor: 1				
		Analysis Time...: 17:37		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275100				
Cobalt	98	(80 - 120)		SW846 6010B	10/02/01	ELEEA1CK
	97	(80 - 120) 0.68 (0-25)		SW846 6010B	10/02/01	ELEEA1CL
		Dilution Factor: 1				
		Analysis Time...: 17:37		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275100				
Copper	105	(80 - 120)		SW846 6010B	10/02/01	ELEEA1CM
	107	(80 - 120) 0.85 (0-25)		SW846 6010B	10/02/01	ELEEA1CN
		Dilution Factor: 1				
		Analysis Time...: 17:37		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275100				
Molybdenum	83	(80 - 120)		SW846 6010B	10/02/01	ELEEA1CP
	86	(80 - 120) 3.0 (0-25)		SW846 6010B	10/02/01	ELEEA1CQ
		Dilution Factor: 1				
		Analysis Time...: 17:37		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275100				
Nickel	104	(80 - 120)		SW846 6010B	10/02/01	ELEEA1CR
	102	(80 - 120) 1.4 (0-25)		SW846 6010B	10/02/01	ELEEA1CT
		Dilution Factor: 1				
		Analysis Time...: 17:37		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275100				

(Continued on next page)

000091

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....:	E1J010219					Matrix.....:	SOLID	
Date Sampled....:	10/01/01 15:00					Date Received..:	10/01/01 17:00	
PARAMETER	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>	RPD <u>RPD</u>	RPD <u>LIMITS</u>	METHOD	PREPARATION- <u>ANALYSIS</u>	WORK <u>DATE</u>	ORDER #
Thallium	92	(75 - 125)	SW846	6010B		10/02/01	ELEEA1CU	
	92	(75 - 125) 0.17 (0-25)	SW846	6010B		10/02/01	ELEEA1CV	
		Dilution Factor: 1						
		Analysis Time...: 17:37		Instrument ID...: M01				Analyst ID.....: 021088
		MS Run #.....: 1275100						
Vanadium	108	(80 - 120)	SW846	6010B		10/02/01	ELEEA1CW	
	106	(80 - 120) 0.56 (0-25)	SW846	6010B		10/02/01	ELEEA1CX	
		Dilution Factor: 1						
		Analysis Time...: 17:37		Instrument ID...: M01				Analyst ID.....: 021088
		MS Run #.....: 1275100						
Zinc	106	(80 - 120)	SW846	6010B		10/02/01	ELEEA1C0	
	112	(80 - 120) 2.9 (0-25)	SW846	6010B		10/02/01	ELEEA1C1	
		Dilution Factor: 1						
		Analysis Time...: 17:37		Instrument ID...: M01				Analyst ID.....: 021088
		MS Run #.....: 1275100						

MS Lot-Sample #: E1J010219-001 **Prep Batch #....:** 1275237

Mercury	103	(80 - 120)	SW846	7471A		10/02/01	ELEEA1C2
	101	(80 - 120) 1.7 (0-20)	SW846	7471A		10/02/01	ELEEA1C3
		Dilution Factor: 1					
		Analysis Time...: 13:56		Instrument ID...: M04			Analyst ID.....: 000023
		MS Run #.....: 1275103					

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

000092

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00

% Moisture.....: 22 Dilution Factor: Initial Wgt/Vol:

DILUTION FACTOR:						Initial Weig/ Vol.		
PARAM	RESULT	DUPLICATE	RPD			METHOD	PREPARATION-	PREP
		RESULT	UNITS	RPD	LIMIT		ANALYSIS DATE	BATCH #
Percent Moisture	22.1	20.2	%	9.0	(0-0.0)	MCAWW	SD Lot-Sample #: E1J010219-001	10/02-10/03/01 1275385
			Dilution Factor: 1				Analysis Time...: 11:00	Analyst ID.....: 000022
			Instrument ID...: W15				MS Run Number...: 1275209	

000093

**SEVERN
TRENT
SERVICES**

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

October 15, 2001

STL LOT NUMBER: E1J060154
NELAP Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

Dear Mr. Zachary,

This report contains the additional analytical results for the sample requested on October 6, 2001. This sample is associated with BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures met method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report. The Aquatic Toxicity test was performed by Aquatic Testing Laboratories. See attached report regarding any related anomaly.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,

Diane Suzuki
Project Manager
CC: Project File

000019

Page 1 of _____ total pages in this report.

000001

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CHANGE ORDER

Lab Analysis No.	E17060154
Client Name	Haley & Aldrich
Contact	Rich Tarson

- | | | | |
|--------------------------|------------------------------|-------------------------------------|----------------|
| <input type="checkbox"/> | CANCEL Work | <input checked="" type="checkbox"/> | ADD Work |
| <input type="checkbox"/> | Chain of Custody Discrepancy | <input type="checkbox"/> | TAT Change |
| <input type="checkbox"/> | Matrix | <input type="checkbox"/> | Sample Problem |
| <input type="checkbox"/> | Tests Not Defined | <input type="checkbox"/> | Other |

EJT 010219-~~ed~~ 20

EXPLANATION/RESOLUTION
SP 19 ~~R~~ & R FISH TOX
add STLC arsenic)

Initiated By:



Date/Time:

10/5/01

Received By:

Date/Time:

Distribution:

000002

Original - Sample Control/Job Folder; Yellow - Lab; Pink - Initiator

ENS-3008

SEVERN
TRENT
SERVICES

Analytical Report

000003

EXECUTIVE SUMMARY - Detection Highlights

E1J060154

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SP_19_R 10/01/01 15:00 001				
Arsenic	0.40 B	1.0	mg/L	SW846 6010B

000004

METHODS SUMMARY

E1J060154

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 CAM TITLE

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

000005

SAMPLE SUMMARY

E1J060154

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
ELP36	001	SP_19_R	10/01/01	15:00

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

000006

HALEY & ALDRICH INC

Client Sample ID: SP 19 R

STLC Metals

Lot-Sample #....: E1J060154-001 Matrix.....: SOLID
Date Sampled...: 10/01/01 15:00 Date Received...: 10/01/01 17:00
Leach Date.....: 10/10/01 Leach Batch #: P128315

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-		WORK
		LIMIT	UNITS			ANALYSIS	DATE	ORDER #
Prep Batch #....:	1285360							
Arsenic	0.40 B	1.0	mg/L		SW846 6010B	10/12-10/15/01	ELP361AC	
		Dilution Factor:	1		Analysis Time...:	11:43	Analyst ID.....:	021088
		Instrumeht ID..:	M01		MS Run #.....:	1285195	MDL.....:	0.0040

NOTE (S) :

Soluable Threshold Limit Concentration (STLC) done in accordance with App II: Waste Extraction procedures. CCR Title 22.

B Estimated result. Result is less than RL.

000007

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TRENT
SERVICES

QA/QC

000008

QC DATA ASSOCIATION SUMMARY

E1J060154

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	SW846 6010B	P128315	1285360	1285195

000009

METHOD BLANK REPORT

STLC Metals

Client Lot #...: E1J060154

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING			<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>	<u>ANALYSIS DATE</u>	<u>ORDER #</u>
		<u>LIMIT</u>	<u>UNITS</u>	<u> </u>					
MB Lot-Sample #:	E1J120000-360	Prep Batch #...:	1285360						
Arsenic	ND	1.0	mg/L		SW846 6010B			10/12-10/15/01	EL4A71AA
		Dilution Factor:	1						
		Analysis Time...:	10:53		Analyst ID....:	021088		Instrument ID...:	M01

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000010

LABORATORY CONTROL SAMPLE DATA REPORT

STLC Metals

Client Lot #....: E1J060154

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	PREPARATION- METHOD	WORK ANALYSIS DATE	ORDER #
LCS Lot-Sample#: E1J120000-360 Prep Batch #....: 1285360							
Arsenic	20.0	21.4	mg/L	107	SW846 6010B	10/12-10/15/01	EL4A71AC
Dilution Factor: 10							
Analysis Time...: 11:01 Analyst ID.....: 021088 Instrument ID...: M01							

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000011

LABORATORY CONTROL SAMPLE EVALUATION REPORT

STLC Metals

Client Lot #....: E1J060154

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY</u>	<u>LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: E1J120000-360 Prep Batch #....: 1285360							
Arsenic	107	(80 - 120)	SW846	6010B	Dilution Factor: 10	10/12-10/15/01	EL4A71AC
					Analysis Time...: 11:01	Analyst ID.....: 021088	Instrument ID.: M01

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000012

MATRIX SPIKE SAMPLE DATA REPORT

STLC Metals

Client Lot #....: E1J060154 Matrix.....: SOLID
Date Sampled....: 10/01/01 15:00 Date Received..: 10/01/01 17:00

SAMPLE PARAMETER	SPIKE AMOUNT	MEASURED AMT	PERCNT UNITS	RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #:	E1J060154-001		Prep Batch #...: 1285360					
Leach Date.....:	10/10/01		Leach Batch #.: P128315					
Arsenic	0.40	20.0	22.0 mg/L	108		SW846 6010B	10/12-10/15/01	ELP361AD
	0.40	20.0	22.1 mg/L	109	0.42	SW846 6010B	10/12-10/15/01	ELP361AE
			Dilution Factor: 10					
			Analysis Time..: 12:14			Instrument ID..: M01		Analyst ID.....: 021088
			MS Run #.....: 1285195					

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000013

MATRIX SPIKE SAMPLE EVALUATION REPORT

STLC Metals

Client Lot #....: E1J060154

Matrix.....: SOLID

Date Sampled...: 10/01/01 15:00 Date Received..: 10/01/01 17:00

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
						<u>ANALYSIS DATE</u>	<u>ORDER #</u>
MS Lot-Sample #:	E1J060154-001	Prep Batch #....:	1285360				
Leach Date.....:	10/10/01	Leach Batch #...:	P128315				
Arsenic	108	(80 - 120)		SW846 6010B		10/12-10/15/01	ELP361AD
	109	(80 - 120)	0.42 (0-20)	SW846 6010B		10/12-10/15/01	ELP361AE
			Dilution Factor: 10				
			Analysis Time...:	12:14	Instrument ID...: M01	Analyst ID.....:	021088
			MS Run #.....:	1285195			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000014

SEVERN
TRENT
SERVICES

Subcontract Reports

000015

LABORATORY REPORT

Date: October 14, 2001

Client: STL - LA
1721 S. Grand Ave.
Santa Ana, CA 92705
Attn: Diane Suzuki



"dedicated to providing quality aquatic toxicity testing"

4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650-0546 FAX (805) 650-0756

Laboratory No.: A-01100902-001
Project No.: E1J060154-001

CA DOHS ELAP Cert. No.: 1775

Sample Control: The samples were received by ATL in a chilled state, seals intact and the chain of custody record attached.

Date Sampled: 10/01/01
Date Received: 10/09/01
Dates Tested: 10/09/01 to 10/14/01

Sample Analysis: The following analyses were performed on your sample:

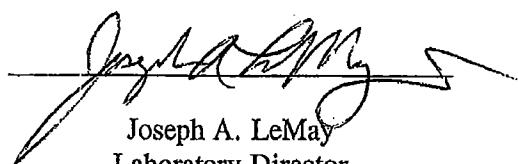
Fathead Minnow Hazardous Waste Screen Bioassay (Polisini and Miller 1988).

Attached are the test data generated from the analysis of your samples.

Result Summary:

<u>ATL Lab No.</u>	<u>STL ID.</u>	<u>Results</u>
A-01100902-001	E1J060154-001	PASSED (LC50 > 750 mg/l)

Quality Control: Reviewed and approved by:


Joseph A. LeMay
Laboratory Director

000016

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of the Laboratory's name for advertising or publicity purpose without authorization is prohibited.

FATHEAD MINNOW HAZARDOUS WASTE
SCREEN BIOASSAY

Lab No.: A01100902-001

Client/ID: STL E1J060154-001



TEST SUMMARY

Species: Pimephales promelas.

Fish length (mm) : av: 24; min: 22; max: 26.

Fish weight (gm) : av: 24; min: 20; max: 30.

Test Protocol: Calif. F&G/DOHS 1988.

Test type: Static.

Test chamber volume 10 l.

Mixing method: Mechanical shaking.

Acclimation/dilution water: Reconstituted soft water.

Aeration: Single bubble through narrow-bore tube.

Source: In-lab culture.

Date fish received: N/A.

Regulations: CCR Title 22.

Endpoints: LC50 at 96 hrs.

Temperature: 20 +/- 2°C.

Number of replicates: 2.

Number of fish per chamber: 10.

Water hardness: 40-48 mg/l CaCO₃.

QA/QC Batch No.: BT011004.

TEST DATA

INITIAL

24 Hr

48 Hr

72 Hr

96 Hr

DATE/TIME:	<u>10-10-01</u> <u>10220</u>	<u>10-11-01</u> <u>10220</u>	<u>10-12-01</u> <u>1030</u>	<u>10-13-01</u> <u>1000</u>	<u>10-14-01</u> <u>0930</u>														
ANALYST:	<u>Lm</u>	<u>Lm</u>	<u>Lm</u>	<u>Lm</u>	<u>gr</u>														
	°C	DO	pH	°C	DO	pH	#D	°C	DO	pH	#D	°C	DO	pH	#D	°C	DO	pH	#D
CONTROL A	19.6	8.2	7.8	20.2	7.9	7.8	0	20.2	7.8	7.7	1	20.3	7.6	7.8	0	20.2	7.5	7.7	0
CONTROL B	19.8	8.3	7.8	20.2	7.9	7.7	0	20.2	7.5	7.7	0	20.3	7.5	7.6	0	20.2	7.6	7.7	0
400 mg/l A	19.8	8.3	7.8	20.2	7.6	7.6	0	20.2	7.2	7.5	0	20.3	7.0	7.4	0	20.1	7.1	7.6	C
400 mg/l B	19.8	8.4	7.8	20.2	7.9	7.5	0	20.2	7.5	7.5	1	20.1	7.4	7.4	2	20.0	7.4	7.4	C
750 mg/l A	19.8	8.4	7.8	20.1	7.6	7.5	0	20.1	6.8	7.4	0	20.2	8.2	7.5	1	20.0	7.4	7.5	0
750 mg/l B	19.7	8.5	7.8	20.1	8.2	7.5	0	20.0	8.0	7.4	0	20.1	7.9	7.5	1	20.1	7.6	7.6	C

Comments:

	CONTROL		HIGH CONCENTRATION	
	Alkalin.	Hardness	Alkalin.	Hardness
Initial	26 mg/l	40 mg/l	26 mg/l	40 mg/l
Final	30 mg/l	44 mg/l	30 mg/l	48 mg/l

Total Number Dead	
CONTROL	0 /20
400 mg/l	2 /20
750 mg/l	2 /20

RESULTS

X	PASSED	LC50 > 750 mg/l (<40% dead in 750 mg/l conc.)
NA	FAILED	>40% dead in 750 (Definitive Test Recommended)
NA	FAILED	LC50 < 400 mg/l (>60% dead in 400 mg/l conc.)

000017

Severn Trent Laboratories, Inc
SAMPLE ANALYSIS REQUISITION

LABORATORY: D7 Aquatic Testing Laboratories
AQUATIC TESTING LABORATORIES
4350 TRANSPORT STREET, UNIT 107
VENTURA, CA 93003

NEED ANALYTICAL REPORT BY
10/11/01

ATTN: JOSEPH A. LEMAY, LAB DIRECTOR

LAB PURCHASE ORDER: SR033985

CLIENT CODE: 458986 PROJECT MANAGER: Diane Suzuki

NUMBER OF SAMPLES IN LOT: 0001

SAMPLE I.D.	SAMPLING DATE	ANALYSIS REQUIRED
E1J060154-001	10/01/01	Archive
ELP36-1-AA		(ARCHIVE) METHOD: NONE

Fish Toxicity.

NEED DETECTION LIMIT AND ANALYSIS DATE INCLUDED IN REPORT.

SHIPPING METHOD: COURIER DATE: 10/08/01

SEND REPORT TO: DIANE SUZUKI

SAMPLE RECEIVED BY: _____ DATE: _____

PLEASE SEND A SIGNED COPY OF THIS FORM WITH REPORT AT COMPLETION OF ANALYSIS.

THANK YOU.

STL Los Angeles

INT: _____ 10/08/01 14:27:08

Aquatic Testing Laboratories
AQUATIC TESTING LABORATORIES
4350 TRANSPORT STREET, UNIT 107

RELINQUISHED BY: dal DATE/TIME: 10/08/01 15:00

RELINQUISHED BY: JW DATE/TIME: _____

RECEIVED FOR LAB BY: JW DATE/TIME: 10-9-01 10:45

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

000018

S E V E R N
T R E N T
SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

September 24, 2001

STL LOT NUMBER: E1I180303
NELAP Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

Dear Mr. Zachary,

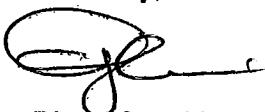
This report contains the analytical results for the sample received under chain of custody by STL Los Angeles on September 18, 2001. This sample is associated with your BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures met method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report. The PAHs by 8310 analysis was performed by Del Mar Analytical. See attached report for any related anomaly.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,



Diane Suzuki
Project Manager
CC: Project File

Page 1 of **000062** total pages in this report.

000001

STL Los Angeles is a part of Severn Trent Laboratories, Inc.



Chain of Custody Record

**SEVERN
TRENT
SERVICES**

Severn Trent Laboratories, Inc.

STL-4124 (0700)

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

BOE-C6-0180607

**STL LOS ANGELES
PROJECT RECEIPT CHECKLIST**

Quantums Lot #: E1I180303
Client Name: Haley & Aldrich
Received by: PLT
Delivered by : Client Airborne Fed Ex
 UPS DHL Other

Date: 9/18/01

Quote #: 42295

Project: Boeing C-6

Date/Time Received: 9/18/01 15:40

DHL In-House Courier Rey B.

Custody Seal Status: Intact Broken None

Custody Seal #(s): _____ **No Seal #:**

Sample Container(s): STL-LA Client N/A

Temperature(s) (COOLER/BLANK) in °C: 4.5°C (CORRECTED TEMP) 4.7°C

Thermometer Used : IR (Infra-red) Digital (Probe)

Samples: Intact Broken Other

Anomalies: No Yes (See Clouseau)

Labeled by AK

Labeling checked by

Turn Around Time: RUSH-24HR RUSH-48HR RUSH-72HR NORMAL

Short-Hold Notification: Ph Wet Chem Metals (Filter/Pres) Encore N/A ...

Outside Analysis(es) (Test/Lab/Date Sent Out) : - 8310 to Del Mar

***** LEAVE NO BLANK SPACES : USE N/A *****

h:HCl na:Sodium Hydroxide zana:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field filtered n/f:HNO3-Lab filtered

CGJ:Clear Glass Jar CGB:Clear Glass Bottle AGJ:Amber Glass Jar AGB:Amber Glass Bottle PB: Poly Bottle E:Encore Sampler V:VOA SL:Sleeve

* Number of VOA's w/ Headspace present

LOGGED BY/DATE: Pacoloth 9/18/07

REVIEWED BY/DATE

000003

EXECUTIVE SUMMARY - Detection Highlights

E1I180303

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SP_20_1 09/18/01 12:15 001				
Mercury	0.022 B	0.10	mg/kg	SW846 7471A
Aluminum	16300	20.0	mg/kg	SW846 6010B
Arsenic	5.2	1.0	mg/kg	SW846 6010B
Antimony	1.1 B	6.0	mg/kg	SW846 6010B
Barium	94.5	2.0	mg/kg	SW846 6010B
Chromium	23.1	1.0	mg/kg	SW846 6010B
Beryllium	0.50	0.50	mg/kg	SW846 6010B
Lead	4.1	0.50	mg/kg	SW846 6010B
Cobalt	8.6	5.0	mg/kg	SW846 6010B
Copper	19.7	2.5	mg/kg	SW846 6010B
Molybdenum	0.52 B	4.0	mg/kg	SW846 6010B
Nickel	16.2	4.0	mg/kg	SW846 6010B
Thallium	1.1	1.0	mg/kg	SW846 6010B
Vanadium	42.8	5.0	mg/kg	SW846 6010B
Zinc	48.4	2.0	mg/kg	SW846 6010B
Methylene chloride	46	5.0	ug/kg	SW846 8260B

000004

METHODS SUMMARY

E11180303

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Extractable Petroleum Hydrocarbons	SW846 8015B	SANA AUTO-SHAKE
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3550B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846 5030

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

000005

SAMPLE SUMMARY

E1I180303

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
EKM99	001	SP_20_1	09/18/01	12:15

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

000006

HALEY & ALDRICH INC

Client Sample ID: SP_20_1

GC Semivolatiles

Lot-Sample #....: E1I180303-001 Work Order #....: EKM991AA Matrix.....: SOLID
 Date Sampled....: 09/18/01 12:15 Date Received...: 09/18/01 15:40 MS Run #.....: 1262099
 Prep Date.....: 09/18/01 Analysis Date...: 09/19/01
 Prep Batch #....: 1262234 Analysis Time...: 13:13
 Dilution Factor: 1
 Analyst ID.....: 356074 Instrument ID...: G02
 Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
C8-C9	ND	10	mg/kg	5.0
C10-C11	ND	10	mg/kg	5.0
C12-C13	ND	10	mg/kg	5.0
C14-C15	ND	10	mg/kg	5.0
C16-C17	ND	10	mg/kg	5.0
C18-C19	ND	10	mg/kg	5.0
C20-C23	ND	10	mg/kg	5.0
C24-C27	ND	10	mg/kg	5.0
C28-C31	ND	10	mg/kg	5.0
C32-C35	ND	10	mg/kg	5.0
C36-C39	ND	10	mg/kg	5.0
C40+	ND	10	mg/kg	5.0
Total Carbon Chain Range	ND	10	mg/kg	5.0
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
Benzo(a)pyrene		RECOVERY	LIMITS	
		92	(60 - 130)	

000007

HALEY & ALDRICH INC

Client Sample ID: SP_20_1

GC Volatiles

Lot-Sample #....: E1I180303-001 **Work Order #....:** EKM991AC **Matrix.....:** SOLID
Date Sampled....: 09/18/01 12:15 **Date Received...:** 09/18/01 15:40 **MS Run #.....:** 1262196
Prep Date.....: 09/19/01 **Analysis Date...:** 09/19/01
Prep Batch #....: 1262369 **Analysis Time..:** 11:15
Dilution Factor: 1
Analyst ID.....: 001464 **Instrument ID...:** G15
Method.....: SW846 8015B

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	MDL
C6-C8	ND	1.0	mg/kg	0.10
SURROGATE	PERCENT	RECOVERY		
	RECOVERY	LIMITS		(60 - 130)
a,a,a-Trifluorotoluene (TFT)	86			

000008

HALEY & ALDRICH INC

Client Sample ID: SP_20_1

GC/MS Volatiles

Lot-Sample #....: E1I180303-001 Work Order #....: EKM991AD Matrix.....: SOLID
 Date Sampled....: 09/18/01 12:15 Date Received...: 09/18/01 15:40 MS Run #.....: 1263292
 Prep Date.....: 09/20/01 Analysis Date...: 09/20/01
 Prep Batch #....: 1263591 Analysis Time...: 12:27
 Dilution Factor: 1
 Analyst ID.....: 999998 Instrument ID...: MSD
 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	2.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	5.0
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	2.0
Methylene chloride	46	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	10
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

000009

HALEY & ALDRICH INC

Client Sample ID: SP_20_1

GC/MS Volatiles

Lot-Sample #....: E1I180303-001 Work Order #....: EKM991AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	5.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0
<u>SURROGATE</u>		PERCENT	RECOVERY	
		RECOVERY	LIMITS	
Bromofluorobenzene		95	(70 - 130)	
1,2-Dichloroethane-d4		84	(60 - 140)	
Toluene-d8		97	(70 - 130)	

000010

HALEY & ALDRICH INC

Client Sample ID: SP_20_1

GC/MS Semivolatiles

Lot-Sample #....: E1I180303-001 Work Order #....: EKM991AE Matrix.....: SOLID
 Date Sampled...: 09/18/01 12:15 Date Received...: 09/18/01 15:40 MS Run #.....: 1262123
 Prep Date.....: 09/19/01 Analysis Date...: 09/19/01
 Prep Batch #....: 1262266 Analysis Time...: 17:40
 Dilution Factor: 1
 Analyst ID.....: 004648 Instrument ID...: MSE
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acenaphthene	ND	330	ug/kg	100
Acenaphthylene	ND	330	ug/kg	100
Anthracene	ND	330	ug/kg	80
Benzo(a)anthracene	ND	330	ug/kg	100
Benzo(b)fluoranthene	ND	330	ug/kg	100
Benzo(k)fluoranthene	ND	330	ug/kg	200
Benzo(ghi)perylene	ND	330	ug/kg	150
Benzo(a)pyrene	ND	330	ug/kg	70
Benzoic acid	ND	1600	ug/kg	500
Benzyl alcohol	ND	330	ug/kg	100
bis(2-Chloroethoxy) methane	ND	330	ug/kg	100
bis(2-Chloroethyl)- ether	ND	330	ug/kg	100
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	110
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	200
4-Bromophenyl phenyl ether	ND	330	ug/kg	80
Butyl benzyl phthalate	ND	330	ug/kg	100
Carbazole	ND	330	ug/kg	80
4-Chloroaniline	ND	330	ug/kg	150
4-Chloro-3-methylphenol	ND	330	ug/kg	100
2-Chloronaphthalene	ND	330	ug/kg	100
2-Chlorophenol	ND	330	ug/kg	150
4-Chlorophenyl phenyl ether	ND	330	ug/kg	90
Chrysene	ND	330	ug/kg	100
Dibenz(a,h)anthracene	ND	330	ug/kg	100
Dibenzofuran	ND	330	ug/kg	90
Di-n-butyl phthalate	ND	330	ug/kg	100
1,2-Dichlorobenzene	ND	330	ug/kg	130
1,3-Dichlorobenzene	ND	330	ug/kg	130
1,4-Dichlorobenzene	ND	330	ug/kg	130
3,3'-Dichlorobenzidine	ND	1600	ug/kg	400
2,4-Dichlorophenol	ND	330	ug/kg	90

(Continued on next page)

000011

HALEY & ALDRICH INC

Client Sample ID: SP_20_1

GC/MS Semivolatiles

Lot-Sample #....: E1I180303-001 Work Order #....: EKM991AE Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Diethyl phthalate	ND	330	ug/kg	100
2,4-Dimethylphenol	ND	330	ug/kg	100
Dimethyl phthalate	ND	330	ug/kg	80
4,6-Dinitro- 2-methylphenol	ND	1600	ug/kg	300
2,4-Dinitrophenol	ND	1600	ug/kg	500
2,4-Dinitrotoluene	ND	330	ug/kg	100
2,6-Dinitrotoluene	ND	330	ug/kg	90
Di-n-octyl phthalate	ND	330	ug/kg	110
Fluoranthene	ND	330	ug/kg	70
Fluorene	ND	330	ug/kg	90
Hexachlorobenzene	ND	330	ug/kg	80
Hexachlorobutadiene	ND	330	ug/kg	100
Hexachlorocyclopenta- diene	ND	1600	ug/kg	370
Hexachloroethane	ND	330	ug/kg	130
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	100
Isophorone	ND	330	ug/kg	100
2-Methylnaphthalene	ND	330	ug/kg	90
2-Methylphenol	ND	330	ug/kg	80
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	100
Naphthalene	ND	330	ug/kg	90
2-Nitroaniline	ND	1600	ug/kg	300
3-Nitroaniline	ND	1600	ug/kg	350
4-Nitroaniline	ND	1600	ug/kg	200
Nitrobenzene	ND	330	ug/kg	150
2-Nitrophenol	ND	330	ug/kg	100
4-Nitrophenol	ND	1600	ug/kg	400
N-Nitrosodiphenylamine	ND	330	ug/kg	80
N-Nitrosodi-n-propyl- amine	ND	330	ug/kg	90
Pentachlorophenol	ND	1600	ug/kg	420
Phenanthrene	ND	330	ug/kg	80
Phenol	ND	330	ug/kg	100
Pyrene	ND	330	ug/kg	120
1,2,4-Trichloro- benzene	ND	330	ug/kg	100
2,4,5-Trichloro- phenol	ND	330	ug/kg	100
2,4,6-Trichloro- phenol	ND	330	ug/kg	70

(Continued on next page)

000012

HALEY & ALDRICH INC

Client Sample ID: SP_20_1

GC/MS Semivolatiles

Lot-Sample #....: E1I180303-001 Work Order #....: EKM991AE Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorobiphenyl	61	(40 - 130)
2-Fluorophenol	56	(50 - 115)
2,4,6-Tribromophenol	60	(30 - 115)
Nitrobenzene-d5	61	(45 - 115)
Phenol-d5	60	(50 - 120)
Terphenyl-d14	72	(50 - 140)

000013

BOE-C6-0180618

HALEY & ALDRICH INC

Client Sample ID: SP_20_1

TOTAL Metals

Lot-Sample #....: E1I180303-001 Date Sampled...: 09/18/01 12:15 Date Received...: 09/18/01 15:40				Matrix.....: SOLID	
PARAMETER	RESULT	REPORTING LIMIT	UNITS	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 1261228					
Mercury	0.022 B	0.10	mg/kg	SW846 7471A	09/18-09/19/01 EKM991A2
		Dilution Factor: 1		Analysis Time...: 10:00	Analyst ID.....: 000023
		Instrument ID...: M04		MS Run #.....: 1261128	MDL.....: 0.020
Prep Batch #....: 1261474					
Aluminum	16300	20.0	mg/kg	SW846 6010B	09/18-09/19/01 EKM991AG
		Dilution Factor: 1		Analysis Time...: 16:12	Analyst ID.....: 0210888
		Instrument ID...: M01		MS Run #.....: 1261264	MDL.....: 8.0
Arsenic	5.2	1.0	mg/kg	SW846 6010B	09/18-09/19/01 EKM991AH
		Dilution Factor: 1		Analysis Time...: 16:12	Analyst ID.....: 0210884
		Instrument ID...: M01		MS Run #.....: 1261264	MDL.....: 0.40
Antimony	1.1 B	6.0	mg/kg	SW846 6010B	09/18-09/19/01 EKM991AJ
		Dilution Factor: 1		Analysis Time...: 16:12	Analyst ID.....: 0210884
		Instrument ID...: M01		MS Run #.....: 1261264	MDL.....: 0.60
Barium	94.5	2.0	mg/kg	SW846 6010B	09/18-09/19/01 EKM991AK
		Dilution Factor: 1		Analysis Time...: 16:12	Analyst ID.....: 0210884
		Instrument ID...: M01		MS Run #.....: 1261264	MDL.....: 0.10
Cadmium	ND	0.50	mg/kg	SW846 6010B	09/18-09/19/01 EKM991AL
		Dilution Factor: 1		Analysis Time...: 16:12	Analyst ID.....: 0210884
		Instrument ID...: M01		MS Run #.....: 1261264	MDL.....: 0.060
Chromium	23.1	1.0	mg/kg	SW846 6010B	09/18-09/19/01 EKM991AM
		Dilution Factor: 1		Analysis Time...: 16:12	Analyst ID.....: 0210884
		Instrument ID...: M01		MS Run #.....: 1261264	MDL.....: 0.10
Beryllium	0.50	0.50	mg/kg	SW846 6010B	09/18-09/19/01 EKM991AN
		Dilution Factor: 1		Analysis Time...: 16:12	Analyst ID.....: 0210884
		Instrument ID...: M01		MS Run #.....: 1261264	MDL.....: 0.050
Lead	4.1	0.50	mg/kg	SW846 6010B	09/18-09/19/01 EKM991AP
		Dilution Factor: 1		Analysis Time...: 16:12	Analyst ID.....: 0210884
		Instrument ID...: M01		MS Run #.....: 1261264	MDL.....: 0.30
Selenium	ND	0.50	mg/kg	SW846 6010B	09/18-09/19/01 EKM991AQ
		Dilution Factor: 1		Analysis Time...: 16:12	Analyst ID.....: 0210884
		Instrument ID...: M01		MS Run #.....: 1261264	MDL.....: 0.40

(Continued on next page)

000014

HALEY & ALDRICH INC

Client Sample ID: SP_20_1

TOTAL Metals

Lot-Sample #....: E1I180303-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS			ANALYSIS DATE	ORDER #
Silver	ND	1.0	mg/kg		SW846 6010B	09/18-09/19/01	EKM991AR
		Dilution Factor: 1		Analysis Time...: 16:12		Analyst ID.....: 0210884	
		Instrument ID...: M01		MS Run #.....: 1261264		MDL.....: 0.10	
Cobalt	8.6	5.0	mg/kg		SW846 6010B	09/18-09/19/01	EKM991AT
		Dilution Factor: 1		Analysis Time...: 16:12		Analyst ID.....: 0210884	
		Instrument ID...: M01		MS Run #.....: 1261264		MDL.....: 0.10	
Copper	19.7	2.5	mg/kg		SW846 6010B	09/18-09/19/01	EKM991AU
		Dilution Factor: 1		Analysis Time...: 16:12		Analyst ID.....: 0210884	
		Instrument ID...: M01		MS Run #.....: 1261264		MDL.....: 0.40	
Molybdenum	0.52 B	4.0	mg/kg		SW846 6010B	09/18-09/19/01	EKM991AV
		Dilution Factor: 1		Analysis Time...: 16:12		Analyst ID.....: 0210884	
		Instrument ID...: M01		MS Run #.....: 1261264		MDL.....: 0.30	
Nickel	16.2	4.0	mg/kg		SW846 6010B	09/18-09/19/01	EKM991AW
		Dilution Factor: 1		Analysis Time...: 16:12		Analyst ID.....: 0210884	
		Instrument ID...: M01		MS Run #.....: 1261264		MDL.....: 0.30	
Thallium	1.1	1.0	mg/kg		SW846 6010B	09/18-09/19/01	EKM991AX
		Dilution Factor: 1		Analysis Time...: 16:12		Analyst ID.....: 0210884	
		Instrument ID...: M01		MS Run #.....: 1261264		MDL.....: 0.80	
Vanadium	42.8	5.0	mg/kg		SW846 6010B	09/18-09/19/01	EKM991AO
		Dilution Factor: 1		Analysis Time...: 16:12		Analyst ID.....: 0210884	
		Instrument ID...: M01		MS Run #.....: 1261264		MDL.....: 0.10	
Zinc	48.4	2.0	mg/kg		SW846 6010B	09/18-09/19/01	EKM991A1
		Dilution Factor: 1		Analysis Time...: 16:12		Analyst ID.....: 0210884	
		Instrument ID...: M01		MS Run #.....: 1261264		MDL.....: 1.0	

NOTE (S) :

B Estimated result. Result is less than RL.

000015

QC DATA ASSOCIATION SUMMARY

E11180303

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	SW846 8015B		1262234	1262099
	SOLID	SW846 8015B		1262369	1262196
	SOLID	SW846 7471A		1261228	1261128
	SOLID	SW846 8260B		1263591	1263292
	SOLID	SW846 8270C		1262266	1262123
	SOLID	SW846 6010B		1261474	1261264

000016

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #....: E1I180303 Work Order #....: EKN031AA Matrix.....: SOLID
MB Lot-Sample #: E1I190000-234

Analysis Date...: 09/19/01 Prep Date.....: 09/18/01 Analysis Time...: 11:55
Dilution Factor: 1 Prep Batch #: 1262234 Instrument ID...: G02

Analyst ID.....: 356074

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	METHOD
C8-C9'	ND	10	mg/kg	SW846 8015B
C10-C11	ND	10	mg/kg	SW846 8015B
C12-C13	ND	10	mg/kg	SW846 8015B
C14-C15	ND	10	mg/kg	SW846 8015B
C16-C17	ND	10	mg/kg	SW846 8015B
C18-C19	ND	10	mg/kg	SW846 8015B
C20-C23	ND	10	mg/kg	SW846 8015B
C24-C27	ND	10	mg/kg	SW846 8015B
C28-C31	ND	10	mg/kg	SW846 8015B
C32-C35	ND	10	mg/kg	SW846 8015B
C36-C39	ND	10	mg/kg	SW846 8015B
C40+	ND	10	mg/kg	SW846 8015B
Total Carbon Chain Range	ND	10	mg/kg	SW846 8015B
SURROGATE	PERCENT	RECOVERY		
	RECOVERY	LIMITS		
Benzo (a) pyrene	91	(60 - 130)		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000017

METHOD BLANK REPORT**GC/MS Semivolatiles**

Client Lot #....: E1I180303 **Work Order #....:** EKN9R1AA **Matrix.....:** SOLID
MB Lot-Sample #: E1I190000-266 **Prep Date.....:** 09/19/01 **Analysis Time..:** 16:33
Analysis Date...: 09/19/01 **Prep Batch #....:** 1262266 **Instrument ID..:** MSE
Dilution Factor: 1 **Analyst ID.....:** 004648

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acenaphthene	ND	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Benzo (a) anthracene	ND	330	ug/kg	SW846 8270C
Benzo (b) fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo (k) fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo (ghi) perylene	ND	330	ug/kg	SW846 8270C
Benzo (a) pyrene	ND	330	ug/kg	SW846 8270C
Benzoic acid	ND	1600	ug/kg	SW846 8270C
Benzyl alcohol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethyl) - ether	ND	330	ug/kg	SW846 8270C
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270C
Carbazole	ND	330	ug/kg	SW846 8270C
4-Chloroaniline	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
Dibenz (a,h) anthracene	ND	330	ug/kg	SW846 8270C
Dibenzofuran	ND	330	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270C
Diethyl phthalate	ND	330	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270C
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C

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000018

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: E1I180303

Work Order #....: EKN9R1AA

Matrix.....: SOLID

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	METHOD
4,6-Dinitro- 2-methylphenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrophenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
Hexachlorobenzene	ND	330	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270C
Hexachlorocyclopenta- diene	ND	1600	ug/kg	SW846 8270C
Hexachloroethane	ND	330	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C
Isophorone	ND	330	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270C
2-Methylphenol	ND	330	ug/kg	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	SW846 8270C
Naphthalene	ND	330	ug/kg	SW846 8270C
2-Nitroaniline	ND	1600	ug/kg	SW846 8270C
3-Nitroaniline	ND	1600	ug/kg	SW846 8270C
4-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Nitrobenzene	ND	330	ug/kg	SW846 8270C
2-Nitrophenol	ND	330	ug/kg	SW846 8270C
4-Nitrophenol	ND	1600	ug/kg	SW846 8270C
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosodi-n-propyl- amine	ND	330	ug/kg	SW846 8270C
Pentachlorophenol	ND	1600	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Phenol	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
1,2,4-Trichloro- benzene	ND	330	ug/kg	SW846 8270C
2,4,5-Trichloro- phenol	ND	330	ug/kg	SW846 8270C
2,4,6-Trichloro- phenol	ND	330	ug/kg	SW846 8270C
SURROGATE	PERCENT	RECOVERY		
	RECOVERY	LIMITS		
2-Fluorobiphenyl	75	(40 - 130)		
2-Fluorophenol	68	(50 - 115)		
2,4,6-Tribromophenol	72	(30 - 115)		

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000019

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: E1I180303

Work Order #....: EKN9R1AA

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
Nitrobenzene-d5	75	(45 - 115)			
Phenol-d5	71	(50 - 120)			
Terphenyl-d14	74	(50 - 140)			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000020

METHOD BLANK REPORT

GC Volatiles

Client Lot #....: E1I180303

MB Lot-Sample #: E1I190000-369

Analysis Date...: 09/19/01

Dilution Factor: 1

Work Order #....: EKPXN1AA

Matrix.....: SOLID

Prep Date.....: 09/19/01

Analysis Time..: 10:22

Prep Batch #....: 1262369

Instrument ID..: G15

Analyst ID.....: 001464

PARAMETER	REPORTING			METHOD
	RESULT	LIMIT	UNITS	
C6-C8	ND	1.0	mg/kg	SW846 8015B
<hr/>				
SURROGATE	PERCENT	RECOVERY		
a,a,a-Trifluorotoluene (TFT)	RECOVERY	LIMITS		
	85	(60 - 130)		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000021

METHOD BLANK REPORT**GC/MS Volatiles**

Client Lot #....: E1I180303
MB Lot-Sample #: E1I200000-591
Analysis Date...: 09/20/01
Dilution Factor: 1

Work Order #....: EKT5R1AA
Prep Date.....: 09/20/01
Prep Batch #....: 1263591
Analyst ID.....: 999998

Matrix.....: SOLID
Analysis Time..: 11:56
Instrument ID..: MSD

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Acrolein	ND	100	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	10	ug/kg	SW846 8260B
Acetone	ND	25	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Vinyl acetate	ND	10	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	25	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Tetrahydrofuran	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	25	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	25	ug/kg	SW846 8260B

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000022

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: E1I180303

Work Order #....: EKT5R1AA

Matrix.....: SOLID

<u>PARAMETER</u>	REPORTING			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	10	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
t-Butanol	ND	100	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B
<u>SURROGATE</u>				
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		
	<u>RECOVERY</u>	<u>LIMITS</u>		
	94	(70 - 130)		
Bromofluorobenzene	91	(60 - 140)		
1,2-Dichloroethane-d4	98	(70 - 130)		
Toluene-d8				

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000023

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: E1I180303

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E1I180000-228 Prep Batch #...: 1261228						
Mercury	ND	0.10	mg/kg	SW846 7471A	09/18-09/19/01	EKL2P1AA
		Dilution Factor: 1				
		Analysis Time...: 09:51		Analyst ID.....: 000023		Instrument ID...: M04
MB Lot-Sample #: E1I180000-474 Prep Batch #...: 1261474						
Aluminum	ND	20.0	mg/kg	SW846 6010B	09/18-09/19/01	EKNA91AA
		Dilution Factor: 1				
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01
Arsenic	ND	1.0	mg/kg	SW846 6010B	09/18-09/19/01	EKNA91AC
		Dilution Factor: 1				
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01
Antimony	ND	6.0	mg/kg	SW846 6010B	09/18-09/19/01	EKNA91AD
		Dilution Factor: 1				
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01
Barium	ND	2.0	mg/kg	SW846 6010B	09/18-09/19/01	EKNA91AE
		Dilution Factor: 1				
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01
Cadmium	ND	0.50	mg/kg	SW846 6010B	09/18-09/19/01	EKNA91AF
		Dilution Factor: 1				
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01
Chromium	ND	1.0	mg/kg	SW846 6010B	09/18-09/19/01	EKNA91AG
		Dilution Factor: 1				
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01
Beryllium	ND	0.50	mg/kg	SW846 6010B	09/18-09/19/01	EKNA91AH
		Dilution Factor: 1				
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01
Lead	ND	0.50	mg/kg	SW846 6010B	09/18-09/19/01	EKNA91AJ
		Dilution Factor: 1				
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01
Selenium	ND	0.50	mg/kg	SW846 6010B	09/18-09/19/01	EKNA91AK
		Dilution Factor: 1				
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01

(Continued on next page)

000024

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: E1I180303

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Silver	ND	1.0	mg/kg	SW846 6010B		09/18-09/19/01	EKNA91AL
		Dilution Factor: 1					
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B		09/18-09/19/01	EKNA91AM
		Dilution Factor: 1					
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01	
Copper	ND	2.5	mg/kg	SW846 6010B		09/18-09/19/01	EKNA91AN
		Dilution Factor: 1					
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01	
Molybdenum	ND	4.0	mg/kg	SW846 6010B		09/18-09/19/01	EKNA91AP
		Dilution Factor: 1					
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01	
Nickel	ND	4.0	mg/kg	SW846 6010B		09/18-09/19/01	EKNA91AQ
		Dilution Factor: 1					
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01	
Thallium	ND	1.0	mg/kg	SW846 6010B		09/18-09/19/01	EKNA91AR
		Dilution Factor: 1					
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01	
Vanadium	ND	5.0	mg/kg	SW846 6010B		09/18-09/19/01	EKNA91AT
		Dilution Factor: 1					
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01	
Zinc	ND	2.0	mg/kg	SW846 6010B		09/18-09/19/01	EKNA91AU
		Dilution Factor: 1					
		Analysis Time...: 17:59		Analyst ID.....: 021088		Instrument ID...: M01	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000025

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1I180303 **Work Order #....:** EKN031AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1I190000-234
Prep Date.....: 09/18/01 **Analysis Date...:** 09/19/01
Prep Batch #....: 1262234 **Analysis Time..:** 12:34
Dilution Factor: 1 **Instrument ID..:** G02
Analyst ID.....: 356074

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	
TPH (as Diesel)	250	210	mg/kg	84 SW846 8015B
SURROGATE		<u>PERCENT</u>	<u>RECOVERY</u>	
Benzo (a) pyrene		RECOVERY	LIMITS	
		81	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000026

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: E1I180303 Work Order #....: EKN9R1AC Matrix.....: SOLID
 LCS Lot-Sample#: E1I190000-266
 Prep Date.....: 09/19/01 Analysis Date...: 09/19/01
 Prep Batch #....: 1262266 Analysis Time...: 17:06
 Dilution Factor: 1 Instrument ID...: MSE
 Analyst ID.....: 004648

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
Acenaphthene	3330	2390	ug/kg	72	SW846 8270C
4-Chloro-3-methylphenol	5000	3540	ug/kg	71	SW846 8270C
2-Chlorophenol	5000	3430	ug/kg	69	SW846 8270C
1,4-Dichlorobenzene	3330	2230	ug/kg	67	SW846 8270C
2,4-Dinitrotoluene	3330	2860	ug/kg	86	SW846 8270C
4-Nitrophenol	5000	3070	ug/kg	61	SW846 8270C
N-Nitrosodi-n-propyl- amine	3330	2580	ug/kg	77	SW846 8270C
Pentachlorophenol	5000	4040	ug/kg	81	SW846 8270C
Phenol	5000	2800	ug/kg	56	SW846 8270C
Pyrene	3330	2450	ug/kg	73	SW846 8270C
1,2,4-Trichloro- benzene	3330	2770	ug/kg	83	SW846 8270C

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
2-Fluorobiphenyl	74	(40 - 130)
2-Fluorophenol	66	(50 - 115)
2,4,6-Tribromophenol	68	(30 - 115)
Nitrobenzene-d5	76	(45 - 115)
Phenol-d5	65	(50 - 120)
Terphenyl-d14	71	(50 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000027

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: E1I180303 Work Order #....: EKPXN1AC Matrix.....: SOLID
LCS Lot-Sample#: E1I190000-369
Prep Date.....: 09/19/01 Analysis Date...: 09/19/01
Prep Batch #....: 1262369 Analysis Time...: 10:48
Dilution Factor: 1 Instrument ID...: G15
Analyst ID.....: 001464

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
TPH (as Gasoline)	5.00	6.35	mg/kg	127	SW846 8015B
<hr/>					
SURROGATE		PERCENT <u>RECOVERY</u>		RECOVERY <u>LIMITS</u>	
a,a,a-Trifluorotoluene (TFT)		115		(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000028

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E1I180303 Work Order #....: EKT5R1AC Matrix.....: SOLID
 LCS Lot-Sample#: E1I200000-591
 Prep Date.....: 09/20/01 Analysis Date...: 09/20/01
 Prep Batch #....: 1263591 Analysis Time...: 11:26
 Dilution Factor: 1 Instrument ID...: MSD
 Analyst ID.....: 999998

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
1,1-Dichloroethene	50.0	56.8	ug/kg	114	SW846 8260B
Benzene	50.0	55.0	ug/kg	110	SW846 8260B
Trichloroethene	50.0	58.0	ug/kg	116	SW846 8260B
Toluene	50.0	49.8	ug/kg	100	SW846 8260B
Chlorobenzene	50.0	49.9	ug/kg	100	SW846 8260B

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
Bromofluorobenzene	93	(70 - 130)
1,2-Dichloroethane-d4	94	(60 - 140)
Toluene-d8	97	(70 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000029

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1I180303

Matrix.....: SOLID

PARAMETER	SPIKE	MEASURED	PERCNT		PREPARATION- ANALYSIS	WORK DATE	WORK ORDER #
	AMOUNT	AMOUNT	UNITS	RECVRY			
LCS Lot-Sample#: E1I180000-228 Prep Batch #....: 1261228							
Mercury	0.833	0.822	mg/kg	99	SW846 7471A	09/18-09/19/01	EKL2P1AC
			Dilution Factor: 1				
			Analysis Time...: 09:53		Analyst ID.....: 000023		Instrument ID...: M04
LCS Lot-Sample#: E1I180000-474 Prep Batch #....: 1261474							
Aluminum	200	181	mg/kg	90	SW846 6010B	09/18-09/19/01	EKNA91AV
			Dilution Factor: 1				
			Analysis Time...: 16:01		Analyst ID.....: 021088		Instrument ID...: M01
Arsenic	200	187	mg/kg	93	SW846 6010B	09/18-09/19/01	EKNA91AW
			Dilution Factor: 1				
			Analysis Time...: 16:01		Analyst ID.....: 021088		Instrument ID...: M01
Antimony	50.0	37.1 N	mg/kg	74	SW846 6010B	09/18-09/19/01	EKNA91AX
			Dilution Factor: 1				
			Analysis Time...: 16:01		Analyst ID.....: 021088		Instrument ID...: M01
Barium	200	197	mg/kg	98	SW846 6010B	09/18-09/19/01	EKNA91A0
			Dilution Factor: 1				
			Analysis Time...: 16:01		Analyst ID.....: 021088		Instrument ID...: M01
Cadmium	5.00	4.92	mg/kg	98	SW846 6010B	09/18-09/19/01	EKNA91A1
			Dilution Factor: 1				
			Analysis Time...: 16:01		Analyst ID.....: 021088		Instrument ID...: M01
Chromium	20.0	20.4	mg/kg	102	SW846 6010B	09/18-09/19/01	EKNA91A2
			Dilution Factor: 1				
			Analysis Time...: 16:01		Analyst ID.....: 021088		Instrument ID...: M01
Beryllium	5.00	5.18	mg/kg	104	SW846 6010B	09/18-09/19/01	EKNA91A3
			Dilution Factor: 1				
			Analysis Time...: 16:01		Analyst ID.....: 021088		Instrument ID...: M01
Lead	50.0	46.2	mg/kg	92	SW846 6010B	09/18-09/19/01	EKNA91A4
			Dilution Factor: 1				
			Analysis Time...: 16:01		Analyst ID.....: 021088		Instrument ID...: M01
Selenium	200	178	mg/kg	89	SW846 6010B	09/18-09/19/01	EKNA91A5
			Dilution Factor: 1				
			Analysis Time...: 16:01		Analyst ID.....: 021088		Instrument ID...: M01

(Continued on next page)

000030

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1I180303

Matrix.....: SOLID

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>UNITS</u>	<u>PERCNT</u>		<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>		<u>RECVRY</u>	<u>ANALYSIS DATE</u>		<u>ANALYSIS DATE</u>	<u>ORDER #</u>
Silver	5.00	4.90	mg/kg	98	SW846 6010B		09/18-09/19/01	EKNA91A6
			Dilution Factor: 1					
			Analysis Time...: 16:01			Analyst ID.....: 021088		Instrument ID...: M01
Cobalt	50.0	49.3	mg/kg	99	SW846 6010B		09/18-09/19/01	EKNA91A7
			Dilution Factor: 1					
			Analysis Time...: 16:01			Analyst ID.....: 021088		Instrument ID...: M01
Copper	25.0	23.9	mg/kg	96	SW846 6010B		09/18-09/19/01	EKNA91A8
			Dilution Factor: 1					
			Analysis Time...: 16:01			Analyst ID.....: 021088		Instrument ID...: M01
Molybdenum	100	96.6	mg/kg	97	SW846 6010B		09/18-09/19/01	EKNA91A9
			Dilution Factor: 1					
			Analysis Time...: 16:01			Analyst ID.....: 021088		Instrument ID...: M01
Nickel	50.0	50.0	mg/kg	100	SW846 6010B		09/18-09/19/01	EKNA91CA
			Dilution Factor: 1					
			Analysis Time...: 16:01			Analyst ID.....: 021088		Instrument ID...: M01
Thallium	200	181	mg/kg	91	SW846 6010B		09/18-09/19/01	EKNA91CC
			Dilution Factor: 1					
			Analysis Time...: 16:01			Analyst ID.....: 021088		Instrument ID...: M01
Vanadium	50.0	50.0	mg/kg	100	SW846 6010B		09/18-09/19/01	EKNA91CD
			Dilution Factor: 1					
			Analysis Time...: 16:01			Analyst ID.....: 021088		Instrument ID...: M01
Zinc	50.0	50.2	mg/kg	100	SW846 6010B		09/18-09/19/01	EKNA91CE
			Dilution Factor: 1					
			Analysis Time...: 16:01			Analyst ID.....: 021088		Instrument ID...: M01

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

000031

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: E1I180303 Work Order #....: EKN031AC Matrix.....: SOLID
LCS Lot-Sample#: E1I190000-234
Prep Date.....: 09/18/01 Analysis Date...: 09/19/01
Prep Batch #....: 1262234 Analysis Time...: 12:34
Dilution Factor: 1 Instrument ID...: G02
Analyst ID.....: 356074

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	84	(60 - 130)	SW846 8015B
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Benzo (a) pyrene	81	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000032

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #....: E1I180303
 LCS Lot-Sample#: E1I190000-266
 Prep Date.....: 09/19/01
 Prep Batch #....: 1262266
 Dilution Factor: 1
 Analyst ID.....: 004648

Work Order #....: EKN9R1AC
 Analysis Date...: 09/19/01
 Analysis Time...: 17:06
 Instrument ID...: MSE

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Acenaphthene	72	(50 - 125)	SW846 8270C
4-Chloro-3-methylphenol	71	(50 - 110)	SW846 8270C
2-Chlorophenol	69	(50 - 120)	SW846 8270C
1,4-Dichlorobenzene	67	(40 - 115)	SW846 8270C
2,4-Dinitrotoluene	86	(40 - 120)	SW846 8270C
4-Nitrophenol	61	(10 - 120)	SW846 8270C
N-Nitrosodi-n-propyl-amine	77	(40 - 120)	SW846 8270C
Pentachlorophenol	81	(20 - 130)	SW846 8270C
Phenol	56	(40 - 110)	SW846 8270C
Pyrene	73	(50 - 140)	SW846 8270C
1,2,4-Trichloro-benzene	83	(50 - 115)	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorobiphenyl	74	(40 - 130)
2-Fluorophenol	66	(50 - 115)
2,4,6-Tribromophenol	68	(30 - 115)
Nitrobenzene-d5	76	(45 - 115)
Phenol-d5	65	(50 - 120)
Terphenyl-d14	71	(50 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000033

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: E1I180303 Work Order #....: EKPXN1AC Matrix.....: SOLID
LCS Lot-Sample#: E1I190000-369
Prep Date.....: 09/19/01 Analysis Date...: 09/19/01
Prep Batch #....: 1262369 Analysis Time...: 10:48
Dilution Factor: 1 Instrument ID...: G15
Analyst ID.....: 001464

PARAMETER	PERCENT	RECOVERY	METHOD
	RECOVERY	LIMITS	
TPH (as Gasoline)	127	(80 - 140)	SW846 8015B
SURROGATE	PERCENT	RECOVERY	
a,a,a-Trifluorotoluene (TFT)	115	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000034

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1I180303 Work Order #....: EKT5R1AC Matrix.....: SOLID
LCS Lot-Sample#: E1I200000-591
Prep Date.....: 09/20/01 Analysis Date...: 09/20/01
Prep Batch #....: 1263591 Analysis Time...: 11:26
Dilution Factor: 1 Instrument ID...: MSD
Analyst ID.....: 999998

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	114	(60 - 150)	SW846 8260B
Benzene	110	(70 - 140)	SW846 8260B
Trichloroethene	116	(70 - 130)	SW846 8260B
Toluene	100	(70 - 130)	SW846 8260B
Chlorobenzene	100	(70 - 130)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	93	(70 - 130)
1,2-Dichloroethane-d4	94	(60 - 140)
Toluene-d8	97	(70 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000035

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1I180303

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: E1I180000-228 Prep Batch #....: 1261228					
Mercury	99	(85 - 115)	SW846 7471A	09/18-09/19/01	EKL2P1AC
		Dilution Factor: 1			
		Analysis Time...: 09:53	Analyst ID.....: 000023	Instrument ID...: M04	
LCS Lot-Sample#: E1I180000-474 Prep Batch #....: 1261474					
Aluminum	90	(70 - 115)	SW846 6010B	09/18-09/19/01	EKNA91AV
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Arsenic	93	(75 - 115)	SW846 6010B	09/18-09/19/01	EKNA91AW
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Antimony	74 N	(75 - 115)	SW846 6010B	09/18-09/19/01	EKNA91AX
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Barium	98	(80 - 120)	SW846 6010B	09/18-09/19/01	EKNA91A0
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Cadmium	98	(80 - 120)	SW846 6010B	09/18-09/19/01	EKNA91A1
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Chromium	102	(85 - 120)	SW846 6010B	09/18-09/19/01	EKNA91A2
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Beryllium	104	(80 - 120)	SW846 6010B	09/18-09/19/01	EKNA91A3
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Lead	92	(80 - 120)	SW846 6010B	09/18-09/19/01	EKNA91A4
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Selenium	89	(70 - 115)	SW846 6010B	09/18-09/19/01	EKNA91A5
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	

(Continued on next page)

000036

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1I180303

Matrix.....: SOLID

PARAMETER	PERCENT	RECOVERY	PREPARATION-		
	RECOVERY	LIMITS	METHOD	ANALYSIS DATE	WORK ORDER #
Silver	98	(80 - 120)	SW846 6010B	09/18-09/19/01	EKNA91A6
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Cobalt	99	(80 - 120)	SW846 6010B	09/18-09/19/01	EKNA91A7
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Copper	96	(80 - 120)	SW846 6010B	09/18-09/19/01	EKNA91A8
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Molybdenum	97	(80 - 120)	SW846 6010B	09/18-09/19/01	EKNA91A9
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Nickel	100	(80 - 120)	SW846 6010B	09/18-09/19/01	EKNA91CA
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Thallium	91	(75 - 125)	SW846 6010B	09/18-09/19/01	EKNA91CC
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Vanadium	100	(80 - 120)	SW846 6010B	09/18-09/19/01	EKNA91CD
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	
Zinc	100	(80 - 120)	SW846 6010B	09/18-09/19/01	EKNA91CE
		Dilution Factor: 1			
		Analysis Time...: 16:01	Analyst ID.....: 021088	Instrument ID...: M01	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

000037

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1I180303

Matrix.....: SOLID

Date Sampled...: 09/14/01 13:00 Date Received...: 09/14/01 15:30

SAMPLE PARAMETER	SPIKE AMOUNT	MEASURED AMT	PERCNT RECVRY	PREPARATION- ANALYSIS DATE	WORK ORDER #
---------------------	-----------------	-----------------	------------------	-------------------------------	-----------------

MS Lot-Sample #: E1I170146-001 Prep Batch #....: 1261228

Mercury

0.027	0.167	0.197	mg/kg	102	SW846	7471A	09/18-09/19/01	EKKR61A0	
0.027	0.167	0.198	mg/kg	103	0.84	SW846	7471A	09/18-09/19/01	EKKR61A1

Dilution Factor: 1

Analysis Time...: 09:56 Instrument ID...: M04

Analyst ID.....: 000023

MS Run #.....: 1261128

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000038

BOE-C6-0180643

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1I180303

Matrix.....: SOLID

Date Sampled...: 09/18/01 12:15 Date Received..: 09/18/01 15:40

PARAMETER	SAMPLE	SPIKE	MEASURED	PERCNT			PREPARATION-	WORK	
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD	ANALYSIS DATE	ORDER #
MS Lot-Sample #: E1I180303-001 Prep Batch #....: 1261474									
Aluminum									
16300	200	19300	NC	mg/kg			SW846 6010B	09/18-09/19/01	EKM991A3
16300	200	21100	NC	mg/kg			SW846 6010B	09/18-09/19/01	EKM991A4
				Dilution Factor: 1					
				Analysis Time...: 16:28			Instrument ID...: M01		Analyst ID.....: 021088
				MS Run #.....: 1261264					
Arsenic									
5.2	200	203		mg/kg	99		SW846 6010B	09/18-09/19/01	EKM991A5
5.2	200	200		mg/kg	97	1.5	SW846 6010B	09/18-09/19/01	EKM991A6
				Dilution Factor: 1					
				Analysis Time...: 16:28			Instrument ID...: M01		Analyst ID.....: 021088
				MS Run #.....: 1261264					
Antimony									
1.1	50.0	7.17	N	mg/kg	12		SW846 6010B	09/18-09/19/01	EKM991A7
1.1	50.0	6.64	N	mg/kg	11	7.6	SW846 6010B	09/18-09/19/01	EKM991A8
				Dilution Factor: 1					
				Analysis Time...: 16:28			Instrument ID...: M01		Analyst ID.....: 021088
				MS Run #.....: 1261264					
Barium									
94.5	200	313		mg/kg	109		SW846 6010B	09/18-09/19/01	EKM991A9
94.5	200	317		mg/kg	111	1.4	SW846 6010B	09/18-09/19/01	EKM991CA
				Dilution Factor: 1					
				Analysis Time...: 16:28			Instrument ID...: M01		Analyst ID.....: 021088
				MS Run #.....: 1261264					
Cadmium									
ND	5.00	4.26		mg/kg	85		SW846 6010B	09/18-09/19/01	EKM991CC
ND	5.00	4.22		mg/kg	84	0.94	SW846 6010B	09/18-09/19/01	EKM991CD
				Dilution Factor: 1					
				Analysis Time...: 16:28			Instrument ID...: M01		Analyst ID.....: 021088
				MS Run #.....: 1261264					
Chromium									
23.1	20.0	47.3	N	mg/kg	121		SW846 6010B	09/18-09/19/01	EKM991CE
23.1	20.0	46.8		mg/kg	119	1.1	SW846 6010B	09/18-09/19/01	EKM991CF
				Dilution Factor: 1					
				Analysis Time...: 16:28			Instrument ID...: M01		Analyst ID.....: 021088
				MS Run #.....: 1261264					

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000039

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1I180303

Matrix.....: SOLID

Date Sampled...: 09/18/01 12:15 Date Received...: 09/18/01 15:40

PARAMETER	SAMPLE	SPIKE	MEASURED	UNITS	PERCNT			PREPARATION- ANALYSIS DATE	WORK ORDER #
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	METHOD		
Beryllium									
	0.50	5.00	5.83	mg/kg	107		SW846 6010B	09/18-09/19/01	EKM991CG
	0.50	5.00	5.80	mg/kg	106	0.44	SW846 6010B	09/18-09/19/01	EKM991CH
	Dilution Factor: 1								
	Analysis Time...: 16:28 Instrument ID...: M01								
	MS Run #.....: 1261264								
Lead									
	4.1	50.0	53.8	mg/kg	99		SW846 6010B	09/18-09/19/01	EKM991CJ
	4.1	50.0	53.3	mg/kg	98	0.89	SW846 6010B	09/18-09/19/01	EKM991CK
	Dilution Factor: 1								
	Analysis Time...: 16:28 Instrument ID...: M01								
	MS Run #.....: 1261264								
Selenium									
	ND	200	192	mg/kg	96		SW846 6010B	09/18-09/19/01	EKM991CL
	ND	200	190	mg/kg	95	0.97	SW846 6010B	09/18-09/19/01	EKM991CM
	Dilution Factor: 1								
	Analysis Time...: 16:28 Instrument ID...: M01								
	MS Run #.....: 1261264								
Silver									
	ND	5.00	4.99	mg/kg	100		SW846 6010B	09/18-09/19/01	EKM991CN
	ND	5.00	4.92	mg/kg	98	1.4	SW846 6010B	09/18-09/19/01	EKM991CP
	Dilution Factor: 1								
	Analysis Time...: 16:28 Instrument ID...: M01								
	MS Run #.....: 1261264								
Cobalt									
	8.6	50.0	60.1	mg/kg	103		SW846 6010B	09/18-09/19/01	EKM991CQ
	8.6	50.0	59.7	mg/kg	102	0.64	SW846 6010B	09/18-09/19/01	EKM991CR
	Dilution Factor: 1								
	Analysis Time...: 16:28 Instrument ID...: M01								
	MS Run #.....: 1261264								
Copper									
	19.7	25.0	49.1	mg/kg	118		SW846 6010B	09/18-09/19/01	EKM991CT
	19.7	25.0	51.8 N	mg/kg	128	5.4	SW846 6010B	09/18-09/19/01	EKM991CU
	Dilution Factor: 1								
	Analysis Time...: 16:28 Instrument ID...: M01								
	MS Run #.....: 1261264								

(Continued on next page)

000040

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....:	E1I180303							Matrix.....:	SOLID	
Date Sampled....:	09/18/01 12:15 Date Received...: 09/18/01 15:40									
PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #	
Molybdenum										
	0.52	100	92.7	mg/kg	92		SW846 6010B	09/18-09/19/01	EKM991CV	
	0.52	100	89.9	mg/kg	89	3.0	SW846 6010B	09/18-09/19/01	EKM991CW	
	Dilution Factor: 1									
	Analysis Time...: 16:28									
	Instrument ID...: M01									
	MS Run #.....: 1261264									
Nickel										
	16.2	50.0	68.0	mg/kg	104		SW846 6010B	09/18-09/19/01	EKM991CX	
	16.2	50.0	69.1	mg/kg	106	1.6	SW846 6010B	09/18-09/19/01	EKM991C0	
	Dilution Factor: 1									
	Analysis Time...: 16:28									
	Instrument ID...: M01									
	MS Run #.....: 1261264									
Thallium										
	1.1	200	200	mg/kg	99		SW846 6010B	09/18-09/19/01	EKM991C1	
	1.1	200	197	mg/kg	98	1.4	SW846 6010B	09/18-09/19/01	EKM991C2	
	Dilution Factor: 1									
	Analysis Time...: 16:28									
	Instrument ID...: M01									
	MS Run #.....: 1261264									
Vanadium										
	42.8	50.0	98.7	mg/kg	112		SW846 6010B	09/18-09/19/01	EKM991C3	
	42.8	50.0	101	mg/kg	117	2.6	SW846 6010B	09/18-09/19/01	EKM991C4	
	Dilution Factor: 1									
	Analysis Time...: 16:28									
	Instrument ID...: M01									
	MS Run #.....: 1261264									
Zinc										
	48.4	50.0	110 N	mg/kg	123		SW846 6010B	09/18-09/19/01	EKM991C5	
	48.4	50.0	111 N	mg/kg	126	1.2	SW846 6010B	09/18-09/19/01	EKM991C6	
	Dilution Factor: 1									
	Analysis Time...: 16:28									
	Instrument ID...: M01									
	MS Run #.....: 1261264									

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

000041

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1I180303 **Work Order #....:** EKM991C7-MS **Matrix.....:** SOLID
MS Lot-Sample #: E1I180303-001 **EKM991C8-MSD**
Date Sampled....: 09/18/01 12:15 **Date Received...:** 09/18/01 15:40 **MS Run #.....:** 1262099
Prep Date.....: 09/18/01 **Analysis Date...:** 09/19/01
Prep Batch #....: 1262234 **Analysis Time...:** 13:52
Dilution Factor: 1 **Analyst ID.....:** 356074 **Instrument ID...:** G02

PARAMETER	SAMPLE SPIKE MEASRD				PERCENT		
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
TPH (as Diesel)	ND	250	236	mg/kg	94		SW846 8015B
	ND	250	217	mg/kg	87	8.3	SW846 8015B

SURROGATE	PERCENT			RECOVERY	
	RECOVERY			LIMITS	
Benzo (a)pyrene	87			(60 - 130)	
	81			(60 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000042

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD	METHOD
Acenaphthene	ND	3330	2440	ug/kg	73		SW846 8270C
	ND	3330	2270	ug/kg	68	7.0	SW846 8270C
4-Chloro-3-methylphenol	ND	5000	3590	ug/kg	72		SW846 8270C
	ND	5000	3400	ug/kg	68	5.4	SW846 8270C
2-Chlorophenol	ND	5000	3580	ug/kg	72		SW846 8270C
	ND	5000	3340	ug/kg	67	6.9	SW846 8270C
1,4-Dichlorobenzene	ND	3330	2360	ug/kg	71		SW846 8270C
	ND	3330	1880	ug/kg	56	23	SW846 8270C
2,4-Dinitrotoluene	ND	3330	2960	ug/kg	89		SW846 8270C
	ND	3330	2900	ug/kg	87	2.2	SW846 8270C
4-Nitrophenol	ND	5000	3330	ug/kg	67		SW846 8270C
	ND	5000	3130	ug/kg	63	6.2	SW846 8270C
N-Nitrosodi-n-propyl- amine	ND	3330	2640	ug/kg	79		SW846 8270C
	ND	3330	2390	ug/kg	72	10	SW846 8270C
Pentachlorophenol	ND	5000	4320	ug/kg	86		SW846 8270C
	ND	5000	4040	ug/kg	81	6.6	SW846 8270C
Phenol	ND	5000	2790	ug/kg	56		SW846 8270C
	ND	5000	2630	ug/kg	53	5.8	SW846 8270C
Pyrene	ND	3330	2410	ug/kg	72		SW846 8270C
	ND	3330	2440	ug/kg	73	1.2	SW846 8270C
1,2,4-Trichloro- benzene	ND	3330	2990	ug/kg	90		SW846 8270C
	ND	3330	2600	ug/kg	78	14	SW846 8270C

<u>SURROGATE</u>	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	71	(40 - 130)
	72	(40 - 130)
2-Fluorophenol	70	(50 - 115)
	66	(50 - 115)
2,4,6-Tribromophenol	73	(30 - 115)
	72	(30 - 115)
Nitrobenzene-d5	74	(45 - 115)
	74	(45 - 115)
Phenol-d5	66	(50 - 120)
	63	(50 - 120)

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000043

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: E1I180303 **Work Order #....:** EKM991C9-MS **Matrix.....:** SOLID
MS Lot-Sample #: E1I180303-001 EKM991DA-MSD

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Terphenyl-d14	73	(50 - 140)
	72	(50 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000044

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCENT		METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	
TPH (as Gasoline)	ND	5.00	6.06	mg/kg	121	SW846 8015B
	ND	5.00	6.20	mg/kg	124	2.2 SW846 8015B
<u>SURROGATE</u>				PERCENT		RECOVERY
a,a,a-Trifluorotoluene (TFT)				RECOVERY		LIMITS
				115		(60 - 130)
				121		(60 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000045

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E1I180303 **Work Order #....:** EKM991DE-MS **Matrix.....:** SOLID
MS Lot-Sample #: E1I180303-001 **EKM991DF-MSD**
Date Sampled....: 09/18/01 12:15 **Date Received...:** 09/18/01 15:40 **MS Run #.....:** 1263292
Prep Date.....: 09/20/01 **Analysis Date...:** 09/20/01
Prep Batch #....: 1263591 **Analysis Time...:** 12:58
Dilution Factor: 1 **Analyst ID.....:** 999998 **Instrument ID..:** MSD

PARAMETER	SAMPLE SPIKE MEASRD				PERCENT		
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	ND	50.0	57.1	ug/kg	114		SW846 8260B
	ND	50.0	53.4	ug/kg	107	6.6	SW846 8260B
Benzene	ND	50.0	55.2	ug/kg	110		SW846 8260B
	ND	50.0	51.0	ug/kg	102	7.9	SW846 8260B
Trichloroethene	ND	50.0	57.4	ug/kg	115		SW846 8260B
	ND	50.0	55.5	ug/kg	111	3.4	SW846 8260B
Toluene	ND	50.0	48.3	ug/kg	97		SW846 8260B
	ND	50.0	45.9	ug/kg	92	5.0	SW846 8260B
Chlorobenzene	ND	50.0	47.9	ug/kg	96		SW846 8260B
	ND	50.0	45.9	ug/kg	92	4.2	SW846 8260B
<hr/>							
SURROGATE	PERCENT				RECOVERY		
	<u>RECOVERY</u>				<u>LIMITS</u>		
Bromofluorobenzene	92				(70 - 130)		
1,2-Dichloroethane-d4	91				(70 - 130)		
Toluene-d8	98				(60 - 140)		
	95				(60 - 140)		
Toluene-d8	101				(70 - 130)		
	98				(70 - 130)		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000046

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1I180303

Matrix.....: SOLID

Date Sampled....: 09/14/01 13:00 Date Received...: 09/14/01 15:30

<u>PARAMETER</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>	RPD <u>RPD</u>	RPD <u>LIMITS</u>	METHOD	PREPARATION- <u>ANALYSIS DATE</u>	WORK <u>ORDER #</u>
MS Lot-Sample #: E1I170146-001 Prep Batch #....: 1261228							
Mercury	102	(80 - 120)		SW846 7471A		09/18-09/19/01	EKKR61A0
	103	(80 - 120) 0.84 (0-20)		SW846 7471A		09/18-09/19/01	EKKR61A1
		Dilution Factor: 1					
		Analysis Time...: 09:56		Instrument ID...: M04		Analyst ID.....:	000023
		MS Run #.....: 1261128					

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000047

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1I180303

Matrix.....: SOLID

Date Sampled...: 09/18/01 12:15 Date Received...: 09/18/01 15:40

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
MS Lot-Sample #: E1I180303-001 Prep Batch #....: 1261474							
Aluminum	NC	(70 - 115)		SW846 6010B		09/18-09/19/01	EKM991A3
	NC	(70 - 115)	(0-25)	SW846 6010B		09/18-09/19/01	EKM991A4
		Dilution Factor: 1					
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....:	021088
		MS Run #.....: 1261264					
Arsenic	99	(75 - 115)		SW846 6010B		09/18-09/19/01	EKM991A5
	97	(75 - 115) 1.5	(0-25)	SW846 6010B		09/18-09/19/01	EKM991A6
		Dilution Factor: 1					
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....:	021088
		MS Run #.....: 1261264					
Antimony	12 N	(75 - 115)		SW846 6010B		09/18-09/19/01	EKM991A7
	11 N	(75 - 115) 7.6	(0-25)	SW846 6010B		09/18-09/19/01	EKM991A8
		Dilution Factor: 1					
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....:	021088
		MS Run #.....: 1261264					
Barium	109	(80 - 120)		SW846 6010B		09/18-09/19/01	EKM991A9
	111	(80 - 120) 1.4	(0-25)	SW846 6010B		09/18-09/19/01	EKM991CA
		Dilution Factor: 1					
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....:	021088
		MS Run #.....: 1261264					
Cadmium	85	(80 - 120)		SW846 6010B		09/18-09/19/01	EKM991CC
	84	(80 - 120) 0.94	(0-25)	SW846 6010B		09/18-09/19/01	EKM991CD
		Dilution Factor: 1					
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....:	021088
		MS Run #.....: 1261264					
Chromium	121 N	(85 - 120)		SW846 6010B		09/18-09/19/01	EKM991CE
	119	(85 - 120) 1.1	(0-25)	SW846 6010B		09/18-09/19/01	EKM991CF
		Dilution Factor: 1					
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....:	021088
		MS Run #.....: 1261264					
Beryllium	107	(80 - 120)		SW846 6010B		09/18-09/19/01	EKM991CG
	106	(80 - 120) 0.44	(0-25)	SW846 6010B		09/18-09/19/01	EKM991CH
		Dilution Factor: 1					
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....:	021088
		MS Run #.....: 1261264					

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000048

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1I180303

Matrix.....: SOLID

Date Sampled...: 09/18/01 12:15 Date Received...: 09/18/01 15:40

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #
Lead	99	(80 - 120)		SW846 6010B	09/18-09/19/01	EKM991CJ
	98	(80 - 120) 0.89 (0-25)		SW846 6010B	09/18-09/19/01	EKM991CK
		Dilution Factor: 1				
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1261264				
Selenium	96	(70 - 115)		SW846 6010B	09/18-09/19/01	EKM991CL
	95	(70 - 115) 0.97 (0-25)		SW846 6010B	09/18-09/19/01	EKM991CM
		Dilution Factor: 1				
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1261264				
Silver	100	(80 - 120)		SW846 6010B	09/18-09/19/01	EKM991CN
	98	(80 - 120) 1.4 (0-25)		SW846 6010B	09/18-09/19/01	EKM991CP
		Dilution Factor: 1				
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1261264				
Cobalt	103	(80 - 120)		SW846 6010B	09/18-09/19/01	EKM991CQ
	102	(80 - 120) 0.64 (0-25)		SW846 6010B	09/18-09/19/01	EKM991CR
		Dilution Factor: 1				
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1261264				
Copper	118	(80 - 120)		SW846 6010B	09/18-09/19/01	EKM991CT
	128 N	(80 - 120) 5.4 (0-25)		SW846 6010B	09/18-09/19/01	EKM991CU
		Dilution Factor: 1				
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1261264				
Molybdenum	92	(80 - 120)		SW846 6010B	09/18-09/19/01	EKM991CV
	89	(80 - 120) 3.0 (0-25)		SW846 6010B	09/18-09/19/01	EKM991CW
		Dilution Factor: 1				
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1261264				
Nickel	104	(80 - 120)		SW846 6010B	09/18-09/19/01	EKM991CX
	106	(80 - 120) 1.6 (0-25)		SW846 6010B	09/18-09/19/01	EKM991CO
		Dilution Factor: 1				
		Analysis Time...: 16:28		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1261264				

(Continued on next page)

000049

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1I180303

Matrix.....: SOLID

Date Sampled...: 09/18/01 12:15 Date Received...: 09/18/01 15:40

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #
Thallium	99	(75 - 125)	SW846 6010B	09/18-09/19/01	EKM991C1	
	98	(75 - 125) 1.4 (0-25)	SW846 6010B	09/18-09/19/01	EKM991C2	
		Dilution Factor: 1				
		Analysis Time...: 16:28	Instrument ID...: M01		Analyst ID.....: 021088	
		MS Run #.....: 1261264				
Vanadium	112	(80 - 120)	SW846 6010B	09/18-09/19/01	EKM991C3	
	117	(80 - 120) 2.6 (0-25)	SW846 6010B	09/18-09/19/01	EKM991C4	
		Dilution Factor: 1				
		Analysis Time...: 16:28	Instrument ID...: M01		Analyst ID.....: 021088	
		MS Run #.....: 1261264				
Zinc	123 N	(80 - 120)	SW846 6010B	09/18-09/19/01	EKM991C5	
	126 N	(80 - 120) 1.2 (0-25)	SW846 6010B	09/18-09/19/01	EKM991C6	
		Dilution Factor: 1				
		Analysis Time...: 16:28	Instrument ID...: M01		Analyst ID.....: 021088	
		MS Run #.....: 1261264				

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

000050

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: E1I180303 Work Order #....: EKM991C7-MS Matrix.....: SOLID
MS Lot-Sample #: E1I180303-001 EKM991C8-MSD
Date Sampled...: 09/18/01 12:15 Date Received...: 09/18/01 15:40 MS Run #.....: 1262099
Prep Date.....: 09/18/01 Analysis Date...: 09/19/01
Prep Batch #....: 1262234 Analysis Time...: 13:52
Dilution Factor: 1 Analyst ID.....: 356074 Instrument ID...: G02

PARAMETER	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>	RPD	RPD <u>LIMITS</u>	METHOD
TPH (as Diesel)	94	(60 - 130)			SW846 8015B
	87	(60 - 130)	8.3	(0-35)	SW846 8015B

SURROGATE	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
Benzo(a)pyrene	87	(60 - 130)
	81	(60 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000051

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Acenaphthene	73	(50 - 125)			SW846 8270C
	68	(50 - 125)	7.0	(0-35)	SW846 8270C
4-Chloro-3-methylphenol	72	(50 - 110)			SW846 8270C
	68	(50 - 110)	5.4	(0-35)	SW846 8270C
2-Chlorophenol	72	(50 - 120)			SW846 8270C
	67	(50 - 120)	6.9	(0-35)	SW846 8270C
1,4-Dichlorobenzene	71	(40 - 115)			SW846 8270C
	56	(40 - 115)	23	(0-35)	SW846 8270C
2,4-Dinitrotoluene	89	(40 - 120)			SW846 8270C
	87	(40 - 120)	2.2	(0-35)	SW846 8270C
4-Nitrophenol	67	(10 - 120)			SW846 8270C
	63	(10 - 120)	6.2	(0-35)	SW846 8270C
N-Nitrosodi-n-propyl- amine	79	(40 - 120)			SW846 8270C
	72	(40 - 120)	10	(0-35)	SW846 8270C
Pentachlorophenol	86	(20 - 130)			SW846 8270C
	81	(20 - 130)	6.6	(0-35)	SW846 8270C
Phenol	56	(40 - 110)			SW846 8270C
	53	(40 - 110)	5.8	(0-35)	SW846 8270C
Pyrene	72	(50 - 140)			SW846 8270C
	73	(50 - 140)	1.2	(0-35)	SW846 8270C
1,2,4-Trichloro- benzene	90	(50 - 115)			SW846 8270C
	78	(50 - 115)	14	(0-35)	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorobiphenyl	71	(40 - 130)
	72	(40 - 130)
2-Fluorophenol	70	(50 - 115)
	66	(50 - 115)
2,4,6-Tribromophenol	73	(30 - 115)
	72	(30 - 115)
Nitrobenzene-d5	74	(45 - 115)
	74	(45 - 115)
Phenol-d5	66	(50 - 120)
	63	(50 - 120)

(Continued on next page)

000052

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: E1I180303 Work Order #...: EKM991C9-MS Matrix.....: SOLID
MS Lot-Sample #: E1I180303-001 EKM991DA-MSD

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Terphenyl-d14	73	(50 - 140)
	72	(50 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000053

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: E1I180303 Work Order #....: EKM991DC-MS Matrix.....: SOLID
MS Lot-Sample #: E1I180303-001 EKM991DD-MSD
Date Sampled...: 09/18/01 12:15 Date Received...: 09/18/01 15:40 MS Run #.....: 1262196
Prep Date.....: 09/19/01 Analysis Date...: 09/19/01
Prep Batch #....: 1262369 Analysis Time...: 11:42
Dilution Factor: 1 Analyst ID.....: 001464 Instrument ID...: G15

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	121	(80 - 140)			SW846 8015B
	124	(80 - 140)	2.2	(0-40)	SW846 8015B
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS			
a,a,a-Trifluorotoluene (TFT)	115	(60 - 130)			
	121	(60 - 130)			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000054

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1I180303 Work Order #....: EKM991DE-MS Matrix.....: SOLID
 MS Lot-Sample #: E1I180303-001 EKM991DF-MSD
 Date Sampled....: 09/18/01 12:15 Date Received...: 09/18/01 15:40 MS Run #.....: 1263292
 Prep Date.....: 09/20/01 Analysis Date...: 09/20/01
 Prep Batch #....: 1263591 Analysis Time...: 12:58
 Dilution Factor: 1 Analyst ID.....: 999998 Instrument ID...: MSD

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>			

1,1-Dichloroethene	114	(60 - 150)			SW846 8260B
	107	(60 - 150)	6.6	(0-30)	SW846 8260B
Benzene	110	(70 - 140)			SW846 8260B
	102	(70 - 140)	7.9	(0-30)	SW846 8260B
Trichloroethene	115	(70 - 130)			SW846 8260B
	111	(70 - 130)	3.4	(0-30)	SW846 8260B
Toluene	97	(70 - 130)			SW846 8260B
	92	(70 - 130)	5.0	(0-30)	SW846 8260B
Chlorobenzene	96	(70 - 130)			SW846 8260B
	92	(70 - 130)	4.2	(0-30)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	92	(70 - 130)
	91	(70 - 130)
1,2-Dichloroethane-d4	98	(60 - 140)
	95	(60 - 140)
Toluene-d8	101	(70 - 130)
	98	(70 - 130)

NOTE (S) :

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Bold print denotes control parameters

000055

Subcontracted Analysis

000056



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
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9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-9596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY REPORT

Prepared For: STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705

Attention: Diane Suzuki
Project: EII180303

Sampled: 09/18/01
Received: 09/19/01
Reported: 09/21/01

*This laboratory report is confidential and is intended for the sole use of
Del Mar Analytical and its client. This entire report was reviewed and approved for release.*

CA ELAP Certificate #1169
AZ DHS License #AZ0062

A handwritten signature in black ink, appearing to read "J. Kiser".

Del Mar Analytical, Colton
J. Kiser
Project Manager

000057

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CKI0161 <Page 1 of 5>



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STL Los Angeles
 1721 S. Grand Avenue
 Santa Ana, CA 92705
 Attention: Diane Suzuki

Client Project ID: E1I180303

Report Number: CKI0161

Sampled:09/18/01
 Received:09/19/01

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Method	Reporting Batch	Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/kg		ug/kg			
Sample ID: CKI0161-01 (SP_20_1 - Soil)								
cenaphthene	EPA 8310	C1I2010	50	ND	1	9/20/01	9/20/01	
cenaphthylene	EPA 8310	C1I2010	200	ND	1	9/20/01	9/20/01	
nthracene	EPA 8310	C1I2010	2.0	ND	1	9/20/01	9/20/01	
enzo(a)anthracene	EPA 8310	C1I2010	2.0	ND	1	9/20/01	9/20/01	
enzo(a)pyrene	EPA 8310	C1I2010	2.0	ND	1	9/20/01	9/20/01	
enzo(b)fluoranthene	EPA 8310	C1I2010	5.0	ND	1	9/20/01	9/20/01	
enzo(g,h,i)perylene	EPA 8310	C1I2010	5.0	ND	1	9/20/01	9/20/01	
enzo(k)fluoranthene	EPA 8310	C1I2010	2.0	ND	1	9/20/01	9/20/01	
rysene	EPA 8310	C1I2010	5.0	ND	1	9/20/01	9/20/01	
ibenzo(a,h)anthracene	EPA 8310	C1I2010	5.0	ND	1	9/20/01	9/20/01	
uoranthene	EPA 8310	C1I2010	5.0	ND	1	9/20/01	9/20/01	
uorene	EPA 8310	C1I2010	5.0	ND	1	9/20/01	9/20/01	
deno(1,2,3-cd)pyrene	EPA 8310	C1I2010	5.0	ND	1	9/20/01	9/20/01	
aphthalene	EPA 8310	C1I2010	40	ND	1	9/20/01	9/20/01	
nenanthrene	EPA 8310	C1I2010	5.0	ND	1	9/20/01	9/20/01	
rene	EPA 8310	C1I2010	5.0	ND	1	9/20/01	9/20/01	
Surrogate: 2-Methylanthracene (35-115%)						72.1 %		

el Mar Analytical, Colton
 lifton J. Kiser
 oject Manager

000058

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CKI0161 <Page 2 of 5>



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 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles
 721 S. Grand Avenue
 Santa Ana, CA 92705
 Attention: Diane Suzuki

Client Project ID: E1I180303

Report Number: CKI0161

Sampled:09/18/01
 Received:09/19/01

METHOD BLANK/QC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyst	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	Data Limit	Qualifiers
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	------------	------------

Batch: CII2010 Extracted: 09/20/01

Blank Analyzed: 09/20/01 (CII2010-BLK1)

benzene	ND	50	ug/kg							
acenaphthene	ND	200	ug/kg							
acenaphthylene	ND	2.0	ug/kg							
anthracene	ND	2.0	ug/kg							
benzo(a)anthracene	ND	2.0	ug/kg							
benzo(a)pyrene	ND	2.0	ug/kg							
benzo(b)fluoranthene	ND	5.0	ug/kg							
benzo(g,h,i)perylene	ND	5.0	ug/kg							
benzo(k)fluoranthene	ND	2.0	ug/kg							
chrysene	ND	5.0	ug/kg							
benzo(a,h)anthracene	ND	5.0	ug/kg							
fluoranthene	ND	5.0	ug/kg							
phenanthrene	ND	5.0	ug/kg							
pyrene	ND	5.0	ug/kg							
Surrogate: 2-Methylanthracene	4.47		ug/kg	8.00		55.9	35-115			

CS Analyzed: 09/20/01 (CII2010-BS1)

										M-NR
benzene	110	50	ug/kg	160		68.8	45-115			
acenaphthene	344	200	ug/kg	320		108	50-115			
anthracene	10.8	2.0	ug/kg	16.0		67.5	55-115			
benzo(a)anthracene	14.3	2.0	ug/kg	16.0		89.4	65-115			
benzo(a)pyrene	11.2	2.0	ug/kg	16.0		70.0	55-115			
benzo(b)fluoranthene	27.5	5.0	ug/kg	32.0		85.9	65-115			
benzo(g,h,i)perylene	28.4	5.0	ug/kg	32.0		88.8	60-115			
benzo(k)fluoranthene	12.8	2.0	ug/kg	16.0		80.0	65-115			
chrysene	14.1	5.0	ug/kg	16.0		88.1	65-115			
benzo(a,h)anthracene	29.2	5.0	ug/kg	32.0		91.2	60-115			
phenanthrene	27.1	5.0	ug/kg	32.0		84.7	65-115			
pyrene	24.2	5.0	ug/kg	32.0		75.6	55-115			
benzo(1,2,3-cd)pyrene	14.1	5.0	ug/kg	16.0		88.1	55-115			
phthalene	148	40	ug/kg	160		92.5	45-115			
phenanthrene	13.5	5.0	ug/kg	16.0		84.4	55-120			
pyrene	15.5	5.0	ug/kg	16.0		96.9	55-115			

Del Mar Analytical, Colton
 J. Kiser
 Project Manager

000059

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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1I180303

Report Number: CKI0161

Sampled:09/18/01
Received:09/19/01

METHOD BLANK/QC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	Data Limit	Data Qualifiers
<u>Batch: C1I2010 Extracted: 09/20/01</u>										
CS Analyzed: 09/20/01 (C1I2010-BS1) Surrogate: 2-Methylnanthracene	5.26		ug/kg	8.00		65.8	35-115			M-NR

Del Mar Analytical, Colton
Jefferson J. Kiser
Project Manager

000060

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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles
721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1I180303

Report Number: CKI0161

Sampled:09/18/01

Received:09/19/01

DATA QUALIFIERS AND DEFINITIONS

- I-NR** No results were reported for the MS/MSD. The sample used for the MS/MSD required dilution due to the sample matrix. Because of this, the spike compounds were diluted below the detection limit.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- [R**] Not reported.
- RPD** Relative Percent Difference

Del Mar Analytical, Colton
Jeffton J. Kiser
Project Manager

000061

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CKI0161 <Page 5 of 5>

**Chain of
Custody Record**

STL-4124 (0700)

To: Del Mar Colton

**SEVERN
TRENT
SERVICES**

Severn Trent Laboratories, Inc.

BOE-C6-0180667

Client STL Los Angeles			Project Manager Diane Suzuki	Date 9/18/01	Chain of Custody Number 049793										
Address 1721 S Grand Ave.			Telephone Number (Area Code)/Fax Number (714) 278 8610 Ext 309	Lab Number EI 180303	Page 1 of 1										
City Santa Ana	State CA	Zip Code 92705	Site Contact	Lab Contact	Analysis (Attach list if more space is needed) 8310 PAH										
Project Name and Location (State) Boeing C-6/Haley & Aldrich			Carrier/Waybill Number												
Contract/Purchase Order/Quote No.			Matrix	Containers & Preservatives	Special Instructions/ Conditions of Receipt 0000012										
Sample I.D. No. and Description (Containers for each sample may be combined on one line)			Air <input checked="" type="checkbox"/>	Aqueous <input type="checkbox"/>		Sed. <input type="checkbox"/>	Soil <input checked="" type="checkbox"/>	Unpres. <input type="checkbox"/>	H ₂ SO ₄ <input type="checkbox"/>	HNO ₃ <input type="checkbox"/>	HCl <input type="checkbox"/>	NaOH <input type="checkbox"/>	ZnAc <input type="checkbox"/>	NaOH <input type="checkbox"/>	
SP-20-1			9/18/01 12:15			X							X		
Possible Hazard Identification															
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown							Sample Disposal								
<input type="checkbox"/> Return To Client							<input checked="" type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months	(A fee may be assessed if samples are retained longer than 3 months)						
Turn Around Time Required															
<input type="checkbox"/> 24 Hours <input checked="" type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input type="checkbox"/> Other _____							QC Requirements (Specify)								
1. Relinquished By Diane Suzuki		Date 9/18/01	Time 16:30	1. Received By Del Mar		Date 9/19/01	Time 0930								
2. Relinquished By Del Mar		Date 9/19/01	Time 0945	2. Received By		Date	Time								
3. Relinquished By Del Mar		Date	Time	3. Received By Del Mar		Date 9/19/01	Time 9:45								
Comments Del Mar sends Eric Schulte 9-19-01 11:15															
3°C															

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

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SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

October 10, 2001

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

STL LOT NUMBER: E1J030176
NELAP Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

Dear Mr. Zachary,

This report contains the analytical results for the four samples received under chain of custody by STL Los Angeles on October 3, 2001. These samples are associated with your BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures met method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report. The PAHs by 8310 analysis was performed by Del Mar Analytical. See attached report for any related anomaly.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,



Diane Suzuki
Project Manager
CC: Project File

Page 1 of _____ total pages in this report.

STL Los Angeles is a part of Severn Trent Laboratories, Inc.



CHANGE ORDER

Lab Analysis No.	EIJ 030176
Client Name	Waley & Aldrich
Contact	Travis Hammond

- | | | | |
|-------------------------------------|------------------------------|--------------------------|----------------|
| <input checked="" type="checkbox"/> | CANCEL Work | <input type="checkbox"/> | ADD Work |
| <input type="checkbox"/> | Chain of Custody Discrepancy | <input type="checkbox"/> | TAT Change |
| <input type="checkbox"/> | Matrix | <input type="checkbox"/> | Sample Problem |
| <input type="checkbox"/> | Tests Not Defined | <input type="checkbox"/> | Other |

EXPLANATION/RESOLUTION

SP - 21-100201-1 → cancel PCB
SP - 21-100201-2
SP - 23-100201-1
SP - 23-100201-2

Initiated By:

1

Received By:

Date/Time:

10/3/01

Date/Time:

Distribution:

Original - Sample Control/Job Folder; Yellow - Lab: Pick - Initiator

**STL LOS ANGELES
PROJECT RECEIPT CHECKLIST**

Quantums Lot #: E1A030174
Client Name: HALEYD ALDRICH
Received by: AJR
Delivered by: Client Airborne Fed Ex
 UPS DES Other

Date: 10/03/01

Quote #: 42295

Project: _____

Date/Time Received: 10/02/01 21.30

DHL In-House Courier Rey B.

Initial / Date

Custody Seal Status: Intact Broken None

Custody Seal #(s): No Seal #

Sample Container(s): STL-LA Client N/A

Temperature(s) (COOLER/BLANK) in °C: 8°C (CORRECTED TEMP) 5°C

Thermometer Used IR (Infra-red) Digital (Probe)

Samples: Intact ($CF = -3.0^{\circ}\text{C}$) Broken Other
.....

Anomalies: No Yes (See Clouseau)

Labeled by _____

Labeling checked by
.....

Time Around Town: □ DUSK 24HR □ DUSK 16HR □ DUSK 12HR □ DUSK 8HR

Turn Around Time: RUSH-24HR RUSH-48HR RUSH-72HR NORMAL
Short Hold Notifications: Yes No

Short-Hold Notification: pH Wet Chem Metals (Filter/Pres) Encore N/A ...

Outside Analysis(es) (Test/Lab/Date Sent Out) :

.....

***** LEAVE NO BLANK SPACES : USE N/A *****

* Number of VOA's w/ Headspace present

LOGGED BY/DATE:

Start 10-03-01, REVIEWED BY/DATE:

10/11/07

SEVERN
TRENT
SERVICES

Analytical Report

EXECUTIVE SUMMARY - Detection Highlights

E1J030176

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SP_21_100201_1 10/02/01 19:00 001				
Aluminum	5950 J	20.0	mg/kg	SW846 6010B
Arsenic	4.5	1.0	mg/kg	SW846 6010B
Barium	44.8	2.0	mg/kg	SW846 6010B
Chromium	10.7 J	1.0	mg/kg	SW846 6010B
Beryllium	0.18 B	0.50	mg/kg	SW846 6010B
Lead	2.2	0.50	mg/kg	SW846 6010B
Cobalt	3.9 B	5.0	mg/kg	SW846 6010B
Copper	5.8	2.5	mg/kg	SW846 6010B
Molybdenum	0.60 B	4.0	mg/kg	SW846 6010B
Nickel	7.3	4.0	mg/kg	SW846 6010B
Vanadium	19.3	5.0	mg/kg	SW846 6010B
Zinc	20.5	2.0	mg/kg	SW846 6010B
SP_21_100201_2 10/02/01 19:00 002				
Arsenic	4.2	1.0	mg/kg	SW846 6010B
Aluminum	7420	20.0	mg/kg	SW846 6010B
Barium	37.9	2.0	mg/kg	SW846 6010B
Chromium	13.6	1.0	mg/kg	SW846 6010B
Beryllium	0.25 B	0.50	mg/kg	SW846 6010B
Lead	2.1	0.50	mg/kg	SW846 6010B
Selenium	0.56	0.50	mg/kg	SW846 6010B
Cobalt	4.5 B	5.0	mg/kg	SW846 6010B
Copper	6.3	2.5	mg/kg	SW846 6010B
Nickel	8.8	4.0	mg/kg	SW846 6010B
Vanadium	23.5	5.0	mg/kg	SW846 6010B
Zinc	27.7	2.0	mg/kg	SW846 6010B
2-Butanone	30	25	ug/kg	SW846 8260B
Chloroform	2.3 J	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	1.4 J	5.0	ug/kg	SW846 8260B
Toluene	4.0 J	5.0	ug/kg	SW846 8260B
SP_23_100201_1 10/02/01 19:00 003				
Total Carbon Chain Range	8.3 J	10	mg/kg	SW846 8015B
C6-C8	0.10 J	1.0	mg/kg	SW846 8015B
Aluminum	11500	20.0	mg/kg	SW846 6010B
Arsenic	15.7	1.0	mg/kg	SW846 6010B
Barium	77.7	2.0	mg/kg	SW846 6010B
Chromium	14.2	1.0	mg/kg	SW846 6010B
Beryllium	0.78	0.50	mg/kg	SW846 6010B
Lead	14.8	0.50	mg/kg	SW846 6010B
Cobalt	4.4 B	5.0	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

E1J030176

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SP_23_100201_1 10/02/01 19:00 003				
Copper	14.8	2.5	mg/kg	SW846 6010B
Nickel	8.4	4.0	mg/kg	SW846 6010B
Vanadium	20.9	5.0	mg/kg	SW846 6010B
Zinc	56.8	2.0	mg/kg	SW846 6010B
Acetone	14000	10000	ug/kg	SW846 8260B
2-Butanone	570000	10000	ug/kg	SW846 8260B
1,1,1-Trichloroethane	2500	2000	ug/kg	SW846 8260B
4-Methyl-2-pentanone	420000	10000	ug/kg	SW846 8260B
Toluene	17000	2000	ug/kg	SW846 8260B
SP_23_100201_2 10/02/01 19:00 004				
C6-C8	290 B	50	mg/kg	SW846 8015B
Mercury	0.040 B	0.10	mg/kg	SW846 7471A
Aluminum	19600	20.0	mg/kg	SW846 6010B
Arsenic	5.4	1.0	mg/kg	SW846 6010B
Barium	121	2.0	mg/kg	SW846 6010B
Chromium	24.4	1.0	mg/kg	SW846 6010B
Beryllium	0.74	0.50	mg/kg	SW846 6010B
Lead	8.1	0.50	mg/kg	SW846 6010B
Selenium	0.57	0.50	mg/kg	SW846 6010B
Cobalt	9.1	5.0	mg/kg	SW846 6010B
Copper	23.3	2.5	mg/kg	SW846 6010B
Nickel	17.4	4.0	mg/kg	SW846 6010B
Vanadium	45.8	5.0	mg/kg	SW846 6010B
Zinc	150	2.0	mg/kg	SW846 6010B
2-Butanone	140000	31000	ug/kg	SW846 8260B
1,1,1-Trichloroethane	37000	6200	ug/kg	SW846 8260B
Trichloroethene	18000	6200	ug/kg	SW846 8260B
Toluene	410000	6200	ug/kg	SW846 8260B
Ethylbenzene	4900 J	6200	ug/kg	SW846 8260B
Xylenes (total)	40000	6200	ug/kg	SW846 8260B

METHODS SUMMARY

ELJ030176

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Extractable Petroleum Hydrocarbons	SW846 8015B	SANA AUTO-SHAKE
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3550B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846 5030

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E1J030176

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
ELG2J	001	SP_21_100201_1	10/02/01	19:00
ELG2Q	002	SP_21_100201_2	10/02/01	19:00
ELG2R	003	SP_23_100201_1	10/02/01	19:00
ELG2T	004	SP_23_100201_2	10/02/01	19:00

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_1

GC Semivolatiles

Lot-Sample #....: E1J030176-001 Work Order #....: ELG2J1AA Matrix.....: SOLID
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1277146
 Prep Date.....: 10/04/01 Analysis Date...: 10/05/01
 Prep Batch #....: 1277315 Analysis Time...: 04:04
 Dilution Factor: 1
 Analyst ID.....: 356074 Instrument ID...: G02
 Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
C8-C9	ND	10	mg/kg	5.0
C10-C11	ND	10	mg/kg	5.0
C12-C13	ND	10	mg/kg	5.0
C14-C15	ND	10	mg/kg	5.0
C16-C17	ND	10	mg/kg	5.0
C18-C19	ND	10	mg/kg	5.0
C20-C23	ND	10	mg/kg	5.0
C24-C27	ND	10	mg/kg	5.0
C28-C31	ND	10	mg/kg	5.0
C32-C35	ND	10	mg/kg	5.0
C36-C39	ND	10	mg/kg	5.0
C40+	ND	10	mg/kg	5.0
Total Carbon Chain Range	ND	10	mg/kg	5.0
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	RECOVERY LIMITS		
		(60 - 130)		
Benzo (a) pyrene	72			

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_1

GC Volatiles

Lot-Sample #...: E1J030176-001 Work Order #...: ELG2J1AC Matrix.....: SOLID
Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1278202
Prep Date.....: 10/04/01 Analysis Date...: 10/05/01
Prep Batch #:...: 1278360 Analysis Time...: 12:23
Dilution Factor: 1
Analyst ID....: 001464 Instrument ID...: G15
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
C6-C8	ND	1.0	mg/kg	0.10
SURROGATE	PERCENT	RECOVERY	LIMITS	
a,a,a-Trifluorotoluene (TFT)	RECOVERY 67	(60 - 130)		

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_1

GC/MS Volatiles

Lot-Sample #....: E1J030176-001 Work Order #....: ELG2J1AD Matrix.....: SOLID
 Date Sampled....: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1281228
 Prep Date.....: 10/04/01 Analysis Date...: 10/04/01
 Prep Batch #....: 1281439 Analysis Time...: 14:46
 Dilution Factor: 1
 Analyst ID.....: 999998 Instrument ID...: MSD
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	2.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	5.0
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	2.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	10
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_1

GC/MS Volatiles

Lot-Sample #...: E1J030176-001 Work Order #...: ELG2J1AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	5.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloropropane	ND	10	ug/kg	3.0
1,2,4-Trichlorobenzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0
 SURROGATE		PERCENT RECOVERY	RECOVERY LIMITS	
Bromofluorobenzene	100	(70 - 130)		
1,2-Dichloroethane-d4	77	(60 - 140)		
Toluene-d8	88	(70 - 130)		

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_1

GC/MS Semivolatiles

Lot-Sample #....: E1J030176-001 Work Order #....: ELG2J1AE Matrix.....: SOLID
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1277294
 Prep Date.....: 10/04/01 Analysis Date...: 10/11/01
 Prep Batch #...: 1277539 Analysis Time...: 00:51
 Dilution Factor: 1
 Analyst ID.....: 010060 Instrument ID...: MSI
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acenaphthene	ND	330	ug/kg	100
Acenaphthylene	ND	330	ug/kg	100
Anthracene	ND	330	ug/kg	80
Benzo(a)anthracene	ND	330	ug/kg	100
Benzo(b)fluoranthene	ND	330	ug/kg	100
Benzo(k)fluoranthene	ND	330	ug/kg	200
Benzo(ghi)perylene	ND	330	ug/kg	150
Benzo(a)pyrene	ND	330	ug/kg	70
Benzoic acid	ND	1600	ug/kg	500
Benzyl alcohol	ND	330	ug/kg	100
bis(2-Chloroethoxy) methane	ND	330	ug/kg	100
bis(2-Chloroethyl)- ether	ND	330	ug/kg	100
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	110
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	200
4-Bromophenyl phenyl ether	ND	330	ug/kg	80
Butyl benzyl phthalate	ND	330	ug/kg	100
Carbazole	ND	330	ug/kg	80
4-Chloroaniline	ND	330	ug/kg	150
4-Chloro-3-methylphenol	ND	330	ug/kg	100
2-Chloronaphthalene	ND	330	ug/kg	100
2-Chlorophenol	ND	330	ug/kg	150
4-Chlorophenyl phenyl ether	ND	330	ug/kg	90
Chrysene	ND	330	ug/kg	100
Dibenz(a, h)anthracene	ND	330	ug/kg	100
Dibenzofuran	ND	330	ug/kg	90
Di-n-butyl phthalate	ND	330	ug/kg	100
1,2-Dichlorobenzene	ND	330	ug/kg	130
1,3-Dichlorobenzene	ND	330	ug/kg	130
1,4-Dichlorobenzene	ND	330	ug/kg	130
3,3'-Dichlorobenzidine	ND	1600	ug/kg	400
2,4-Dichlorophenol	ND	330	ug/kg	90

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_1

GC/MS Semivolatiles

Lot-Sample #...: E1J030176-001 Work Order #...: ELG2J1AE Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Diethyl phthalate	ND	330	ug/kg	100
2,4-Dimethylphenol	ND	330	ug/kg	100
Dimethyl phthalate	ND	330	ug/kg	80
4,6-Dinitro- 2-methylphenol	ND	1600	ug/kg	300
2,4-Dinitrophenol	ND	1600	ug/kg	500
2,4-Dinitrotoluene	ND	330	ug/kg	100
2,6-Dinitrotoluene	ND	330	ug/kg	90
Di-n-octyl phthalate	ND	330	ug/kg	110
Fluoranthene	ND	330	ug/kg	70
Fluorene	ND	330	ug/kg	90
Hexachlorobenzene	ND	330	ug/kg	80
Hexachlorobutadiene	ND	330	ug/kg	100
Hexachlorocyclopenta- diene	ND	1600	ug/kg	370
Hexachloroethane	ND	330	ug/kg	130
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	100
Isophorone	ND	330	ug/kg	100
2-Methylnaphthalene	ND	330	ug/kg	90
2-Methylphenol	ND	330	ug/kg	80
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	100
Naphthalene	ND	330	ug/kg	90
2-Nitroaniline	ND	1600	ug/kg	300
3-Nitroaniline	ND	1600	ug/kg	350
4-Nitroaniline	ND	1600	ug/kg	200
Nitrobenzene	ND	330	ug/kg	150
2-Nitrophenol	ND	330	ug/kg	100
4-Nitrophenol	ND	1600	ug/kg	400
N-Nitrosodiphenylamine	ND	330	ug/kg	80
N-Nitrosodi-n-propyl- amine	ND	330	ug/kg	90
Pentachlorophenol	ND	1600	ug/kg	420
Phenanthrene	ND	330	ug/kg	80
Phenol	ND	330	ug/kg	100
Pyrene	ND	330	ug/kg	120
1,2,4-Trichloro- benzene	ND	330	ug/kg	100
2,4,5-Trichloro- phenol	ND	330	ug/kg	100
2,4,6-Trichloro- phenol	ND	330	ug/kg	70

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_1

GC/MS Semivolatiles

Lot-Sample #...: E1J030176-001 Work Order #...: ELG2J1AE Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	85	(40 - 130)
2-Fluorophenol	75	(50 - 115)
2,4,6-Tribromophenol	44	(30 - 115)
Nitrobenzene-d5	72	(45 - 115)
Phenol-d5	72	(50 - 120)
Terphenyl-d14	85	(50 - 140)

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_2

GC Semivolatiles

Lot-Sample #....: E1J030176-002 Work Order #....: ELG2Q1AE Matrix.....: SOLID
 Date Sampled....: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1277146
 Prep Date.....: 10/04/01 Analysis Date...: 10/05/01
 Prep Batch #....: 1277315 Analysis Time...: 04:43
 Dilution Factor: 1
 Analyst ID.....: 356074 Instrument ID...: G02
 Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
C8-C9	ND	10	mg/kg	5.0
C10-C11	ND	10	mg/kg	5.0
C12-C13	ND	10	mg/kg	5.0
C14-C15	ND	10	mg/kg	5.0
C16-C17	ND	10	mg/kg	5.0
C18-C19	ND	10	mg/kg	5.0
C20-C23	ND	10	mg/kg	5.0
C24-C27	ND	10	mg/kg	5.0
C28-C31	ND	10	mg/kg	5.0
C32-C35	ND	10	mg/kg	5.0
C36-C39	ND	10	mg/kg	5.0
C40+	ND	10	mg/kg	5.0
Total Carbon Chain Range	ND	10	mg/kg	5.0
SURROGATE	PERCENT RECOVERY	RECOVERY		
		LIMITS	(60 - 130)	
Benzo (a) pyrene	90			

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_2

GC Volatiles

Lot-Sample #....: E1J030176-002 Work Order #....: ELG2Q1AF Matrix.....: SOLID
Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1278202
Prep Date.....: 10/05/01 Analysis Date...: 10/05/01
Prep Batch #....: 1278360 Analysis Time...: 14:22
Dilution Factor: 1
Analyst ID.....: 001464 Instrument ID...: G16
Method.....: SW846 8015B

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	MDL
C6-C8	ND	1.0	mg/kg	0.10
SURROGATE				PERCENT
a,a,a-Trifluorotoluene (TFT)		RECOVERY	LIMITS	RECOVERY
	70	(60 - 130)		

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_2

GC/MS Volatiles

Lot-Sample #....: E1J030176-002 Work Order #....: ELG2Q1AG Matrix.....: SOLID
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1281228
 Prep Date.....: 10/04/01 Analysis Date...: 10/04/01
 Prep Batch #....: 1281439 Analysis Time...: 15:17
 Dilution Factor: 1
 Analyst ID.....: 999998 Instrument ID...: MSD
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	2.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	5.0
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	2.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	30	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	2.3 J	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	10
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	1.4 J	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	4.0 J	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_2

GC/MS Volatiles

Lot-Sample #....: E1J030176-002 Work Order #....: ELG2Q1AG Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	5.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0
<u>SURROGATE</u>		PERCENT RECOVERY	RECOVERY LIMITS	
Bromofluorobenzene	100		(70 - 130)	
1,2-Dichloroethane-d4	77		(60 - 140)	
Toluene-d8	88		(70 - 130)	

NOTE (S) :

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_2

GC/MS Semivolatiles

Lot-Sample #....: E1J030176-002 Work Order #....: ELG2Q1AH Matrix.....: SOLID
 Date Sampled....: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1277294
 Prep Date.....: 10/04/01 Analysis Date...: 10/11/01
 Prep Batch #....: 1277539 Analysis Time...: 11:31
 Dilution Factor: 1
 Analyst ID.....: 010060 Instrument ID...: MSI
 Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Acenaphthene	ND	330	ug/kg	100
Acenaphthylene	ND	330	ug/kg	100
Anthracene	ND	330	ug/kg	80
Benzo (a) anthracene	ND	330	ug/kg	100
Benzo (b) fluoranthene	ND	330	ug/kg	100
Benzo (k) fluoranthene	ND	330	ug/kg	200
Benzo (ghi) perylene	ND	330	ug/kg	150
Benzo (a) pyrene	ND	330	ug/kg	70
Benzoic acid	ND	1600	ug/kg	500
Benzyl alcohol	ND	330	ug/kg	100
bis(2-Chloroethoxy) methane	ND	330	ug/kg	100
bis(2-Chloroethyl)- ether	ND	330	ug/kg	100
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	110
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	200
4-Bromophenyl phenyl ether	ND	330	ug/kg	80
Butyl benzyl phthalate	ND	330	ug/kg	100
Carbazole	ND	330	ug/kg	80
4-Chloroaniline	ND	330	ug/kg	150
4-Chloro-3-methylphenol	ND	330	ug/kg	100
2-Chloronaphthalene	ND	330	ug/kg	100
2-Chlorophenol	ND	330	ug/kg	150
4-Chlorophenyl phenyl ether	ND	330	ug/kg	90
Chrysene	ND	330	ug/kg	100
Dibenz (a, h) anthracene	ND	330	ug/kg	100
Dibenzofuran	ND	330	ug/kg	90
Di-n-butyl phthalate	ND	330	ug/kg	100
1,2-Dichlorobenzene	ND	330	ug/kg	130
1,3-Dichlorobenzene	ND	330	ug/kg	130
1,4-Dichlorobenzene	ND	330	ug/kg	130
3,3'-Dichlorobenzidine	ND	1600	ug/kg	400
2,4-Dichlorophenol	ND	330	ug/kg	90

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HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_2

GC/MS Semivolatiles

Lot-Sample #....: E1J030176-002 Work Order #....: ELG2Q1AH Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Diethyl phthalate	ND	330	ug/kg	100
2,4-Dimethylphenol	ND	330	ug/kg	100
Dimethyl phthalate	ND	330	ug/kg	80
4,6-Dinitro- 2-methylphenol	ND	1600	ug/kg	300
2,4-Dinitrophenol	ND	1600	ug/kg	500
2,4-Dinitrotoluene	ND	330	ug/kg	100
2,6-Dinitrotoluene	ND	330	ug/kg	90
Di-n-octyl phthalate	ND	330	ug/kg	110
Fluoranthene	ND	330	ug/kg	70
Fluorene	ND	330	ug/kg	90
Hexachlorobenzene	ND	330	ug/kg	80
Hexachlorobutadiene	ND	330	ug/kg	100
Hexachlorocyclopenta- diene	ND	1600	ug/kg	370
Hexachloroethane	ND	330	ug/kg	130
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	100
Isophorone	ND	330	ug/kg	100
2-Methylnaphthalene	ND	330	ug/kg	90
2-Methylphenol	ND	330	ug/kg	80
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	100
Naphthalene	ND	330	ug/kg	90
2-Nitroaniline	ND	1600	ug/kg	300
3-Nitroaniline	ND	1600	ug/kg	350
4-Nitroaniline	ND	1600	ug/kg	200
Nitrobenzene	ND	330	ug/kg	150
2-Nitrophenol	ND	330	ug/kg	100
4-Nitrophenol	ND	1600	ug/kg	400
N-Nitrosodiphenylamine	ND	330	ug/kg	80
N-Nitrosodi-n-propyl- amine	ND	330	ug/kg	90
Pentachlorophenol	ND	1600	ug/kg	420
Phenanthrene	ND	330	ug/kg	80
Phenol	ND	330	ug/kg	100
Pyrene	ND	330	ug/kg	120
1,2,4-Trichloro- benzene	ND	330	ug/kg	100
2,4,5-Trichloro- phenol	ND	330	ug/kg	100
2,4,6-Trichloro- phenol	ND	330	ug/kg	70

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BAILEY & ALDRICH INC

Client Sample ID: SP_21_100201_2

GC/MS Semivolatiles

Lot-Sample #....: E1J030176-002 Work Order #....: ELG2Q1AH Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorobiphenyl	71	(40 - 130)
2-Fluorophenol	72	(50 - 115)
2,4,6-Tribromophenol	63	(30 - 115)
Nitrobenzene-d5	66	(45 - 115)
Phenol-d5	70	(50 - 120)
Terphenyl-d14	68	(50 - 140)

HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_1

GC Semivolatiles

Lot-Sample #....: E1J030176-003 Work Order #....: ELG2R1AE Matrix.....: SOLID
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1277146
 Prep Date.....: 10/04/01 Analysis Date...: 10/05/01
 Prep Batch #....: 1277315 Analysis Time...: 06:41
 Dilution Factor: 1
 Analyst ID.....: 356074 Instrument ID...: G02
 Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
C8-C9	ND	10	mg/kg	5.0
C10-C11	ND	10	mg/kg	5.0
C12-C13	ND	10	mg/kg	5.0
C14-C15	ND	10	mg/kg	5.0
C16-C17	ND	10	mg/kg	5.0
C18-C19	ND	10	mg/kg	5.0
C20-C23	ND	10	mg/kg	5.0
C24-C27	ND	10	mg/kg	5.0
C28-C31	ND	10	mg/kg	5.0
C32-C35	ND	10	mg/kg	5.0
C36-C39	ND	10	mg/kg	5.0
C40+	ND	10	mg/kg	5.0
Total Carbon Chain Range	8.3 J	10	mg/kg	5.0
<hr/>				
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		
		<u>RECOVERY</u>	<u>LIMITS</u>	
Benzo(a)pyrene	88	(60 - 130)		

NOTE(S) :

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_1

GC Volatiles

Lot-Sample #...: E1J030176-003 Work Order #...: ELG2R1AF Matrix.....: SOLID
Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1278202
Prep Date.....: 10/05/01 Analysis Date...: 10/05/01
Prep Batch #...: 1278360 Analysis Time...: 14:51
Dilution Factor: 1
Analyst ID....: 001464 Instrument ID.: G16
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
C6-C8	0.10 J	1.0	mg/kg	0.10
SURROGATE	PERCENT	RECOVERY		
a,a,a-Trifluorotoluene (TFT)	RECOVERY	LIMITS		
	74	(60 - 130)		

NOTE(S) :

J Estimated result. Result is less than RL.

Unknown peaks were detected.

HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_1

GC/MS Volatiles

Lot-Sample #....: E1J030176-003 Work Order #....: ELG2R1AG Matrix.....: SOLID
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1281224
 Prep Date.....: 10/04/01 Analysis Date...: 10/04/01
 Prep Batch #...: 1281436 Analysis Time...: 19:30
 Dilution Factor: 8
 Analyst ID.....: 999998 Instrument ID...: MSD
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	4000	ug/kg	170
Chloromethane	ND	4000	ug/kg	200
Vinyl chloride	ND	4000	ug/kg	150
Bromomethane	ND	4000	ug/kg	250
1,2-Dibromoethane	ND	2000	ug/kg	70
Chloroethane	ND	4000	ug/kg	250
Trichlorofluoromethane	ND	4000	ug/kg	70
Acrolein	ND	40000	ug/kg	2000
1,1-Dichloroethene	ND	2000	ug/kg	120
Iodomethane	ND	4000	ug/kg	250
Acetone	14000	10000	ug/kg	400
Carbon disulfide	ND	2000	ug/kg	100
Methylene chloride	ND	2000	ug/kg	50
trans-1,2-Dichloroethene	ND	2000	ug/kg	120
Acrylonitrile	ND	40000	ug/kg	2000
Methyl tert-butyl ether	ND	2000	ug/kg	100
1,1-Dichloroethane	ND	2000	ug/kg	100
Vinyl acetate	ND	4000	ug/kg	250
2,2-Dichloropropane	ND	2000	ug/kg	60
cis-1,2-Dichloroethene	ND	2000	ug/kg	100
2-Butanone	570000	10000	ug/kg	500
Bromochloromethane	ND	2000	ug/kg	75
Chloroform	ND	2000	ug/kg	70
Tetrahydrofuran	ND	8000	ug/kg	500
1,1,1-Trichloroethane	2500	2000	ug/kg	70
1,1-Dichloropropene	ND	2000	ug/kg	100
Carbon tetrachloride	ND	2000	ug/kg	60
Benzene	ND	2000	ug/kg	100
1,2-Dichloroethane	ND	2000	ug/kg	70
Trichloroethene	ND	2000	ug/kg	60
1,2-Dichloropropane	ND	2000	ug/kg	100
Bromodichloromethane	ND	2000	ug/kg	100
2-Chloroethyl vinyl ether	ND	4000	ug/kg	250
cis-1,3-Dichloropropene	ND	2000	ug/kg	100
4-Methyl-2-pentanone	420000	10000	ug/kg	400
Toluene	17000	2000	ug/kg	60
trans-1,3-Dichloropropene	ND	2000	ug/kg	70

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HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_1

GC/MS Volatiles

Lot-Sample #...: E1J030176-003 Work Order #...: ELG2R1AG Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
1,1,2-Trichloroethane	ND	2000	ug/kg	100
Tetrachloroethene	ND	2000	ug/kg	80
2-Hexanone	ND	10000	ug/kg	300
Dibromochloromethane	ND	2000	ug/kg	100
Chlorobenzene	ND	2000	ug/kg	100
Ethylbenzene	ND	2000	ug/kg	70
Xylenes (total)	ND	2000	ug/kg	170
Styrene	ND	4000	ug/kg	100
Bromoform	ND	2000	ug/kg	100
Isopropylbenzene	ND	2000	ug/kg	120
p-Isopropyltoluene	ND	2000	ug/kg	70
Bromobenzene	ND	2000	ug/kg	70
1,1,1,2-Tetrachloroethane	ND	2000	ug/kg	50
1,1,2,2-Tetrachloroethane	ND	2000	ug/kg	100
1,2,3-Trichloropropane	ND	2000	ug/kg	110
n-Propylbenzene	ND	2000	ug/kg	110
2-Chlorotoluene	ND	2000	ug/kg	70
4-Chlorotoluene	ND	2000	ug/kg	70
1,3,5-Trimethylbenzene	ND	2000	ug/kg	120
tert-Butylbenzene	ND	2000	ug/kg	70
1,2,4-Trimethylbenzene	ND	2000	ug/kg	70
sec-Butylbenzene	ND	2000	ug/kg	70
1,3-Dichlorobenzene	ND	2000	ug/kg	70
1,4-Dichlorobenzene	ND	2000	ug/kg	100
1,2-Dichlorobenzene	ND	2000	ug/kg	100
n-Butylbenzene	ND	2000	ug/kg	70
1,2-Dibromo-3-chloro-propane	ND	4000	ug/kg	150
1,2,4-Trichloro-benzene	ND	2000	ug/kg	70
Hexachlorobutadiene	ND	2000	ug/kg	70
1,2,3-Trichlorobenzene	ND	2000	ug/kg	70
t-Butanol	ND	40000	ug/kg	2500
Isopropyl ether	ND	4000	ug/kg	100
Tert-amyl methyl ether	ND	4000	ug/kg	100
Tert-butyl ethyl ether	ND	4000	ug/kg	100
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>	
Bromofluorobenzene	126	(60 - 140)		
1,2-Dichloroethane-d4	99	(60 - 140)		
Toluene-d8	122	(60 - 140)		

HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_1

GC/MS Semivolatiles

Lot-Sample #....: E1J030176-003 Work Order #....: ELG2R1AH Matrix.....: SOLID
 Date Sampled....: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1277294
 Prep Date.....: 10/04/01 Analysis Date...: 10/11/01
 Prep Batch #....: 1277539 Analysis Time...: 10:59
 Dilution Factor: 1
 Analyst ID.....: 010060 Instrument ID.: MSI
 Method.: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	330	ug/kg	100
Acenaphthylene	ND	330	ug/kg	100
Anthracene	ND	330	ug/kg	80
Benzo(a)anthracene	ND	330	ug/kg	100
Benzo(b)fluoranthene	ND	330	ug/kg	100
Benzo(k)fluoranthene	ND	330	ug/kg	200
Benzo(ghi)perylene	ND	330	ug/kg	150
Benzo(a)pyrene	ND	330	ug/kg	70
Benzoic acid	ND	1600	ug/kg	500
Benzyl alcohol	ND	330	ug/kg	100
bis(2-Chloroethoxy) methane	ND	330	ug/kg	100
bis(2-Chloroethyl)- ether	ND	330	ug/kg	100
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	110
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	200
4-Bromophenyl phenyl ether	ND	330	ug/kg	80
Butyl benzyl phthalate	ND	330	ug/kg	100
Carbazole	ND	330	ug/kg	80
4-Chloroaniline	ND	330	ug/kg	150
4-Chloro-3-methylphenol	ND	330	ug/kg	100
2-Chloronaphthalene	ND	330	ug/kg	100
2-Chlorophenol	ND	330	ug/kg	150
4-Chlorophenyl phenyl ether	ND	330	ug/kg	90
Chrysene	ND	330	ug/kg	100
Dibenz(a, h)anthracene	ND	330	ug/kg	100
Dibenzofuran	ND	330	ug/kg	90
Di-n-butyl phthalate	ND	330	ug/kg	100
1,2-Dichlorobenzene	ND	330	ug/kg	130
1,3-Dichlorobenzene	ND	330	ug/kg	130
1,4-Dichlorobenzene	ND	330	ug/kg	130
3,3'-Dichlorobenzidine	ND	1600	ug/kg	400
2,4-Dichlorophenol	ND	330	ug/kg	90

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_1

GC/MS Semivolatiles

Lot-Sample #....: E1J030176-003 Work Order #....: ELG2R1AH Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	330	ug/kg	100
2,4-Dimethylphenol	ND	330	ug/kg	100
Dimethyl phthalate	ND	330	ug/kg	80
4,6-Dinitro- 2-methylphenol	ND	1600	ug/kg	300
2,4-Dinitrophenol	ND	1600	ug/kg	500
2,4-Dinitrotoluene	ND	330	ug/kg	100
2,6-Dinitrotoluene	ND	330	ug/kg	90
Di-n-octyl phthalate	ND	330	ug/kg	110
Fluoranthene	ND	330	ug/kg	70
Fluorene	ND	330	ug/kg	90
Hexachlorobenzene	ND	330	ug/kg	80
Hexachlorobutadiene	ND	330	ug/kg	100
Hexachlorocyclopenta- diene	ND	1600	ug/kg	370
Hexachloroethane	ND	330	ug/kg	130
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	100
Isophorone	ND	330	ug/kg	100
2-Methylnaphthalene	ND	330	ug/kg	90
2-Methylphenol	ND	330	ug/kg	80
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	100
Naphthalene	ND	330	ug/kg	90
2-Nitroaniline	ND	1600	ug/kg	300
3-Nitroaniline	ND	1600	ug/kg	350
4-Nitroaniline	ND	1600	ug/kg	200
Nitrobenzene	ND	330	ug/kg	150
2-Nitrophenol	ND	330	ug/kg	100
4-Nitrophenol	ND	1600	ug/kg	400
N-Nitrosodiphenylamine	ND	330	ug/kg	80
N-Nitrosodi-n-propyl- amine	ND	330	ug/kg	90
Pentachlorophenol	ND	1600	ug/kg	420
Phenanthrene	ND	330	ug/kg	80
Phenol	ND	330	ug/kg	100
Pyrene	ND	330	ug/kg	120
1,2,4-Trichloro- benzene	ND	330	ug/kg	100
2,4,5-Trichloro- phenol	ND	330	ug/kg	100
2,4,6-Trichloro- phenol	ND	330	ug/kg	70

(Continued on next page)

HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_1

GC/MS Semivolatiles

Lot-Sample #...: E1J030176-003 Work Order #...: ELG2R1AH Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorobiphenyl	69	(40 - 130)
2-Fluorophenol	59	(50 - 115)
2,4,6-Tribromophenol	59	(30 - 115)
Nitrobenzene-d5	61	(45 - 115)
Phenol-d5	74	(50 - 120)
Terphenyl-d14	91	(50 - 140)

HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_2

GC Semivolatiles

Lot-Sample #....: E1J030176-004 Work Order #....: ELG2T1AE Matrix.....: SOLID
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1277146
 Prep Date.....: 10/04/01 Analysis Date...: 10/05/01
 Prep Batch #....: 1277315 Analysis Time...: 07:20
 Dilution Factor: 1
 Analyst ID.....: 356074 Instrument ID...: G02
 Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
C8-C9	ND	10	mg/kg	5.0
C10-C11	ND	10	mg/kg	5.0
C12-C13	ND	10	mg/kg	5.0
C14-C15	ND	10	mg/kg	5.0
C16-C17	ND	10	mg/kg	5.0
C18-C19	ND	10	mg/kg	5.0
C20-C23	ND	10	mg/kg	5.0
C24-C27	ND	10	mg/kg	5.0
C28-C31	ND	10	mg/kg	5.0
C32-C35	ND	10	mg/kg	5.0
C36-C39	ND	10	mg/kg	5.0
C40+	ND	10	mg/kg	5.0
Total Carbon Chain Range	ND	10	mg/kg	5.0
<u>SURROGATE</u>		<u>PERCENT</u>	RECOVERY	
Benzo(a)pyrene		83	LIMITS (60 - 130)	

HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_2

GC Volatiles

Lot-Sample #....: E1J030176-004 Work Order #....: ELG2T1AF Matrix.....: SOLID
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....:
 Prep Date.....: 10/05/01 Analysis Date...: 10/05/01
 Prep Batch #....: 1278359 Analysis Time...: 08:30
 Dilution Factor: 5
 Analyst ID.....: 001464 Instrument ID...: G15
 Method.....: SW846 8015B

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
<u>C6-C8</u>	290 B	50	mg/kg
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
a,a,a-Trifluorotoluene (TFT)	323 *	(60 - 130)	

NOTE (S) :

- * Surrogate recovery is outside stated control limits.
- B Method blank contamination. The associated method blank contains the target analyte at a reportable level.
- The gasoline pattern appears degraded; matrix interference with TFT.

HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_2

GC/MS Volatiles

Lot-Sample #....: E1J030176-004 Work Order #....: ELG2T1AG Matrix.....: SOLID
 Date Sampled....: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1281224
 Prep Date.....: 10/04/01 Analysis Date...: 10/04/01
 Prep Batch #....: 1281436 Analysis Time...: 20:01
 Dilution Factor: 25
 Analyst ID.....: 999998 Instrument ID...: MSD
 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Dichlorodifluoromethane	ND	12000	ug/kg	4200	
Chloromethane	ND	12000	ug/kg	5000	
Vinyl chloride	ND	12000	ug/kg	3800	
Bromomethane	ND	12000	ug/kg	6200	
1,2-Dibromoethane	ND	6200	ug/kg	1800	
Chloroethane	ND	12000	ug/kg	6200	
Trichlorofluoromethane	ND	12000	ug/kg	1800	
Acrolein	ND	120000	ug/kg	50000	
1,1-Dichloroethene	ND	6200	ug/kg	3000	
Iodomethane	ND	12000	ug/kg	6200	
Acetone	ND	31000	ug/kg	10000	
Carbon disulfide	ND	6200	ug/kg	2500	
Methylene chloride	ND	6200	ug/kg	1200	
trans-1,2-Dichloroethene	ND	6200	ug/kg	3000	
Acrylonitrile	ND	120000	ug/kg	50000	
Methyl tert-butyl ether	ND	6200	ug/kg	2500	
1,1-Dichloroethane	ND	6200	ug/kg	2500	
Vinyl acetate	ND	12000	ug/kg	6200	
2,2-Dichloropropane	ND	6200	ug/kg	1500	
cis-1,2-Dichloroethene	ND	6200	ug/kg	2500	
2-Butanone	140000	31000	ug/kg	12000	
Bromochloromethane	ND	6200	ug/kg	1900	
Chloroform	ND	6200	ug/kg	1800	
Tetrahydrofuran	ND	25000	ug/kg	12000	
1,1,1-Trichloroethane	37000	6200	ug/kg	1800	
1,1-Dichloropropene	ND	6200	ug/kg	2500	
Carbon tetrachloride	ND	6200	ug/kg	1500	
Benzene	ND	6200	ug/kg	2500	
1,2-Dichloroethane	ND	6200	ug/kg	1800	
Trichloroethene	18000	6200	ug/kg	1500	
1,2-Dichloropropane	ND	6200	ug/kg	2500	
Bromodichloromethane	ND	6200	ug/kg	2500	
2-Chloroethyl vinyl ether	ND	12000	ug/kg	6200	
cis-1,3-Dichloropropene	ND	6200	ug/kg	2500	
4-Methyl-2-pentanone	ND	31000	ug/kg	10000	
Toluene	410000	6200	ug/kg	1500	
trans-1,3-Dichloropropene	ND	6200	ug/kg	1800	

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HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_2

GC/MS Volatiles

Lot-Sample #...: E1J030176-004 Work Order #...: ELG2T1AG Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	6200	ug/kg	2500
Tetrachloroethene	ND	6200	ug/kg	2000
2-Hexanone	ND	31000	ug/kg	7500
Dibromochloromethane	ND	6200	ug/kg	2500
Chlorobenzene	ND	6200	ug/kg	2500
Ethylbenzene	4900 J	6200	ug/kg	1800
Xylenes (total)	40000	6200	ug/kg	4200
Styrene	ND	12000	ug/kg	2500
Bromoform	ND	6200	ug/kg	2500
Isopropylbenzene	ND	6200	ug/kg	3000
p-Isopropyltoluene	ND	6200	ug/kg	1800
Bromobenzene	ND	6200	ug/kg	1800
1,1,1,2-Tetrachloroethane	ND	6200	ug/kg	1200
1,1,2,2-Tetrachloroethane	ND	6200	ug/kg	2500
1,2,3-Trichloropropane	ND	6200	ug/kg	2800
n-Propylbenzene	ND	6200	ug/kg	2800
2-Chlorotoluene	ND	6200	ug/kg	1800
4-Chlorotoluene	ND	6200	ug/kg	1800
1,3,5-Trimethylbenzene	ND	6200	ug/kg	3000
tert-Butylbenzene	ND	6200	ug/kg	1800
1,2,4-Trimethylbenzene	ND	6200	ug/kg	1800
sec-Butylbenzene	ND	6200	ug/kg	1800
1,3-Dichlorobenzene	ND	6200	ug/kg	1800
1,4-Dichlorobenzene	ND	6200	ug/kg	2500
1,2-Dichlorobenzene	ND	6200	ug/kg	2500
n-Butylbenzene	ND	6200	ug/kg	1800
1,2-Dibromo-3-chloro-propane	ND	12000	ug/kg	3800
1,2,4-Trichloro-benzene	ND	6200	ug/kg	1800
Hexachlorobutadiene	ND	6200	ug/kg	1800
1,2,3-Trichlorobenzene	ND	6200	ug/kg	1800
t-Butanol	ND	120000	ug/kg	62000
Isopropyl ether	ND	12000	ug/kg	2500
Tert-amyl methyl ether	ND	12000	ug/kg	2500
Tert-butyl ethyl ether	ND	12000	ug/kg	2500

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
		(60 - 140)	(60 - 140)
Bromofluorobenzene	0.0 SRD, NC	(60 - 140)	
1,2-Dichloroethane-d4	0.0 SRD, NC	(60 - 140)	
Toluene-d8	0.0 SRD, NC	(60 - 140)	

NOTE(S) :

SRD The surrogate recovery was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

NC The recovery and/or RPD were not calculated.

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_2

GC/MS Semivolatiles

Lot-Sample #....: E1J030176-004 Work Order #....: ELG2T2AH Matrix.....: SOLID
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1284264
 Prep Date.....: 10/11/01 Analysis Date...: 10/15/01
 Prep Batch #....: 1284523 Analysis Time...: 13:19
 Dilution Factor: 1
 Analyst ID.....: 010060 Instrument ID...: MSI
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	330	ug/kg	100
Acenaphthylene	ND	330	ug/kg	100
Anthracene	ND	330	ug/kg	80
Benzo(a)anthracene	ND	330	ug/kg	100
Benzo(b)fluoranthene	ND	330	ug/kg	100
Benzo(k)fluoranthene	ND	330	ug/kg	200
Benzo(ghi)perylene	ND	330	ug/kg	150
Benzo(a)pyrene	ND	330	ug/kg	70
Benzocic acid	ND	1600	ug/kg	500
Benzyl alcohol	ND	330	ug/kg	100
bis(2-Chloroethoxy) methane	ND	330	ug/kg	100
bis(2-Chloroethyl)- ether	ND	330	ug/kg	100
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	110
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	200
4-Bromophenyl phenyl ether	ND	330	ug/kg	80
Butyl benzyl phthalate	ND	330	ug/kg	100
Carbazole	ND	330	ug/kg	80
4-Chloroaniline	ND	330	ug/kg	150
4-Chloro-3-methylphenol	ND	330	ug/kg	100
2-Chloronaphthalene	ND	330	ug/kg	100
2-Chlorophenol	ND	330	ug/kg	150
4-Chlorophenyl phenyl ether	ND	330	ug/kg	90
Chrysene	ND	330	ug/kg	100
Dibenz(a,h)anthracene	ND	330	ug/kg	100
Dibenzofuran	ND	330	ug/kg	90
Di-n-butyl phthalate	ND	330	ug/kg	100
1,2-Dichlorobenzene	ND	330	ug/kg	130
1,3-Dichlorobenzene	ND	330	ug/kg	130
1,4-Dichlorobenzene	ND	330	ug/kg	130
3,3'-Dichlorobenzidine	ND	1600	ug/kg	400
2,4-Dichlorophenol	ND	330	ug/kg	90

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HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_2

GC/MS Semivolatiles

Lot-Sample #...: E1J030176-004 Work Order #: ELG2T2AH Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	330	ug/kg	100
2,4-Dimethylphenol	ND	330	ug/kg	100
Dimethyl phthalate	ND	330	ug/kg	80
4,6-Dinitro- 2-methylphenol	ND	1600	ug/kg	300
2,4-Dinitrophenol	ND	1600	ug/kg	500
2,4-Dinitrotoluene	ND	330	ug/kg	100
2,6-Dinitrotoluene	ND	330	ug/kg	90
Di-n-octyl phthalate	ND	330	ug/kg	110
Fluoranthene	ND	330	ug/kg	70
Fluorene	ND	330	ug/kg	90
Hexachlorobenzene	ND	330	ug/kg	80
Hexachlorobutadiene	ND	330	ug/kg	100
Hexachlorocyclopenta- diene	ND	1600	ug/kg	370
Hexachloroethane	ND	330	ug/kg	130
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	100
Isophorone	ND	330	ug/kg	100
2-Methylnaphthalene	ND	330	ug/kg	90
2-Methylphenol	ND	330	ug/kg	80
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	100
Naphthalene	ND	330	ug/kg	90
2-Nitroaniline	ND	1600	ug/kg	300
3-Nitroaniline	ND	1600	ug/kg	350
4-Nitroaniline	ND	1600	ug/kg	200
Nitrobenzene	ND	330	ug/kg	150
2-Nitrophenol	ND	330	ug/kg	100
4-Nitrophenol	ND	1600	ug/kg	400
N-Nitrosodiphenylamine	ND	330	ug/kg	80
N-Nitrosodi-n-propyl- amine	ND	330	ug/kg	90
Pentachlorophenol	ND	1600	ug/kg	420
Phenanthrene	ND	330	ug/kg	80
Phenol	ND	330	ug/kg	100
Pyrene	ND	330	ug/kg	120
1,2,4-Trichloro- benzene	ND	330	ug/kg	100
2,4,5-Trichloro- phenol	ND	330	ug/kg	100
2,4,6-Trichloro- phenol	ND	330	ug/kg	70

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HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_2

GC/MS Semivolatiles

Lot-Sample #....: E1J030176-004 Work Order #....: ELG2T2AH Matrix.....: SOLID

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorobiphenyl	53	(40 - 130)
2-Fluorophenol	56	(50 - 115)
2,4,6-Tribromophenol	77	(30 - 115)
Nitrobenzene-d5	49	(45 - 115)
Phenol-d5	59	(50 - 120)
Terphenyl-d14	64	(50 - 140)

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_1

TOTAL Metals

Lot-Sample #....: E1J030176-001
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Prep Batch #....: 1277280							
Aluminum	5950 J	20.0	mg/kg	SW846 6010B	10/04/01	ELG2J1AG	
		Dilution Factor: 1		Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument: ID...: M01		MS Run #.....: 1277128	MDL.....: 8.0		
Arsenic	4.5	1.0	mg/kg	SW846 6010B	10/04/01	ELG2J1AH	
		Dilution Factor: 1		Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument: ID...: M01		MS Run #.....: 1277128	MDL.....: 0.40		
Antimony	ND	6.0	mg/kg	SW846 6010B	10/04-10/05/01	ELG2J1AJ	
		Dilution Factor: 1		Analysis Time...: 14:36	Analyst ID.....: 0210888		
		Instrument: ID...: M01		MS Run #.....: 1277128	MDL.....: 0.60		
Barium	44.8	2.0	mg/kg	SW846 6010B	10/04/01	ELG2J1AK	
		Dilution Factor: 1		Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument: ID...: M01		MS Run #.....: 1277128	MDL.....: 0.10		
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/04/01	ELG2J1AL	
		Dilution Factor: 1		Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument: ID...: M01		MS Run #.....: 1277128	MDL.....: 0.060		
Chromium	10.7 J	1.0	mg/kg	SW846 6010B	10/04/01	ELG2J1AM	
		Dilution Factor: 1		Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument: ID...: M01		MS Run #.....: 1277128	MDL.....: 0.10		
Beryllium	0.18 B	0.50	mg/kg	SW846 6010B	10/04/01	ELG2J1AN	
		Dilution Factor: 1		Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument: ID...: M01		MS Run #.....: 1277128	MDL.....: 0.050		
Lead	2.2	0.50	mg/kg	SW846 6010B	10/04/01	ELG2J1AP	
		Dilution Factor: 1		Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument: ID...: M01		MS Run #.....: 1277128	MDL.....: 0.30		
Selenium	ND	0.50	mg/kg	SW846 6010B	10/04/01	ELG2J1AQ	
		Dilution Factor: 1		Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument: ID...: M01		MS Run #.....: 1277128	MDL.....: 0.40		
Silver	ND	1.0	mg/kg	SW846 6010B	10/04/01	ELG2J1AR	
		Dilution Factor: 1		Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument: ID...: M01		MS Run #.....: 1277128	MDL.....: 0.10		

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HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_1

TOTAL Metals

Lot-Sample #....: E1J030176-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ORDER #
		LIMIT	UNITS					
Cobalt	3.9 B	5.0	mg/kg		SW846 6010B	10/04/01	ELG2J1AT	
		Dilution Factor: 1			Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument ID...: M01			MS Run #.....: 1277128	MDL.....: 0.10		
Copper	5.8	2.5	mg/kg		SW846 6010B	10/04/01	ELG2J1AU	
		Dilution Factor: 1			Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument ID...: M01			MS Run #.....: 1277128	MDL.....: 0.40		
Molybdenum	0.60 B	4.0	mg/kg		SW846 6010B	10/04/01	ELG2J1AV	
		Dilution Factor: 1			Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument ID...: M01			MS Run #.....: 1277128	MDL.....: 0.30		
Nickel	7.3	4.0	mg/kg		SW846 6010B	10/04/01	ELG2J1AW	
		Dilution Factor: 1			Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument ID...: M01			MS Run #.....: 1277128	MDL.....: 0.30		
Thallium	ND	1.0	mg/kg		SW846 6010B	10/04/01	ELG2J1AX	
		Dilution Factor: 1			Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument ID...: M01			MS Run #.....: 1277128	MDL.....: 0.80		
Vanadium	19.3	5.0	mg/kg		SW846 6010B	10/04/01	ELG2J1AO	
		Dilution Factor: 1			Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument ID...: M01			MS Run #.....: 1277128	MDL.....: 0.10		
Zinc	20.5	2.0	mg/kg		SW846 6010B	10/04/01	ELG2J1AI	
		Dilution Factor: 1			Analysis Time...: 20:36	Analyst ID.....: 0210888		
		Instrument ID...: M01			MS Run #.....: 1277128	MDL.....: 1.0		
Prep Batch #....: 1278216								
Mercury	ND	0.10	mg/kg		SW846 7471A	10/05/01	ELG2J1A2	
		Dilution Factor: 1			Analysis Time...: 13:58	Analyst ID.....: 0000238		
		Instrument ID...: M04			MS Run #.....: 1278099	MDL.....: 0.020		

NOTE (S) :

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_2

TOTAL Metals

Lot-Sample #....: E1J030176-002 Matrix.....: SOLID
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Prep Batch #....: 1278213							
Arsenic	4.2	1.0	mg/kg	SW846 6010B	10/05/01	ELG2Q1AL	
		Dilution Factor: 1		Analysis Time...: 21:59	Analyst ID.....: 021088		
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.40		
Aluminum	7420	20.0	mg/kg	SW846 6010B	10/05/01	ELG2Q1AK	
		Dilution Factor: 1		Analysis Time...: 21:59	Analyst ID.....: 0210888		
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 8.0		
Antimony	ND	6.0	mg/kg	SW846 6010B	10/05/01	ELG2Q1AM	
		Dilution Factor: 1		Analysis Time...: 21:59	Analyst ID.....: 0210888		
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.60		
Barium	37.9	2.0	mg/kg	SW846 6010B	10/05/01	ELG2Q1AN	
		Dilution Factor: 1		Analysis Time...: 21:59	Analyst ID.....: 0210888		
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.10		
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/05/01	ELG2Q1AP	
		Dilution Factor: 1		Analysis Time...: 21:59	Analyst ID.....: 0210888		
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.060		
Chromium	13.6	1.0	mg/kg	SW846 6010B	10/05/01	ELG2Q1AQ	
		Dilution Factor: 1		Analysis Time...: 21:59	Analyst ID.....: 0210888		
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.10		
Beryllium	0.25 B	0.50	mg/kg	SW846 6010B	10/05/01	ELG2Q1AR	
		Dilution Factor: 1		Analysis Time...: 21:59	Analyst ID.....: 0210888		
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.050		
Lead	2.1	0.50	mg/kg	SW846 6010B	10/05/01	ELG2Q1AT	
		Dilution Factor: 1		Analysis Time...: 21:59	Analyst ID.....: 0210888		
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.30		
Selenium	0.56	0.50	mg/kg	SW846 6010B	10/05/01	ELG2Q1AU	
		Dilution Factor: 1		Analysis Time...: 21:59	Analyst ID.....: 0210888		
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.40		
Silver	ND	1.0	mg/kg	SW846 6010B	10/05/01	ELG2Q1AV	
		Dilution Factor: 1		Analysis Time...: 21:59	Analyst ID.....: 0210888		
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.10		

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HALEY & ALDRICH INC

Client Sample ID: SP_21_100201_2

TOTAL Metals

Lot-Sample #...: E1J030176-002

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS			ANALYSIS DATE	ORDER #
Cobalt	4.5 B	5.0	mg/kg		SW846 6010B	10/05/01	ELG2Q1AW
		Dilution Factor: 1			Analysis Time...: 21:59	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.10	
Copper	6.3	2.5	mg/kg		SW846 6010B	10/05/01	ELG2Q1AX
		Dilution Factor: 1			Analysis Time...: 21:59	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.40	
Molybdenum	ND	4.0	mg/kg		SW846 6010B	10/05/01	ELG2Q1AO
		Dilution Factor: 1			Analysis Time...: 21:59	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.30	
Nickel	8.8	4.0	mg/kg		SW846 6010B	10/05/01	ELG2Q1AI
		Dilution Factor: 1			Analysis Time...: 21:59	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg		SW846 6010B	10/05/01	ELG2Q1A2
		Dilution Factor: 1			Analysis Time...: 21:59	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.80	
Vanadium	23.5	5.0	mg/kg		SW846 6010B	10/05/01	ELG2Q1AA
		Dilution Factor: 1			Analysis Time...: 21:59	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.10	
Zinc	27.7	2.0	mg/kg		SW846 6010B	10/05/01	ELG2Q1AC
		Dilution Factor: 1			Analysis Time...: 21:59	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 1.0	
Prep Batch #...: 1278216							
Mercury	ND	0.10	mg/kg		SW846 7471A	10/05/01	ELG2Q1AD
		Dilution Factor: 1			Analysis Time...: 14:03	Analyst ID.....: 0000238	
		Instrument ID...: M04			MS Run #.....: 1278099	MDL.....: 0.020	

NOTE(S) :

B - Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_1

TOTAL Metals

Lot-Sample #....: E1J030176-003
 Date Sampled....: 10/02/01 19:00 Date Received...: 10/02/01 21:30 Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....: 1278213						
Aluminum	11500	20.0	mg/kg	SW846 6010B	10/05/01	ELG2R1AK
		Dilution Factor: 1		Analysis Time...: 22:49	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 8.0	
Arsenic	15.7	1.0	mg/kg	SW846 6010B	10/05/01	ELG2R1AL
		Dilution Factor: 1		Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/05/01	ELG2R1AM
		Dilution Factor: 1		Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.60	
Barium	77.7	2.0	mg/kg	SW846 6010B	10/05/01	ELG2R1AN
		Dilution Factor: 1		Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/05/01	ELG2R1AP
		Dilution Factor: 1		Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.060	
Chromium	14.2	1.0	mg/kg	SW846 6010B	10/05/01	ELG2R1AQ
		Dilution Factor: 1		Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.10	
Beryllium	0.78	0.50	mg/kg	SW846 6010B	10/05/01	ELG2R1AR
		Dilution Factor: 1		Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.050	
Lead	14.8	0.50	mg/kg	SW846 6010B	10/05/01	ELG2R1AT
		Dilution Factor: 1		Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	10/05/01	ELG2R1AU
		Dilution Factor: 1		Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/05/01	ELG2R1AV
		Dilution Factor: 1		Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.10	

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HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_1

TOTAL Metals

Lot-Sample #....: E1J030176-003

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Cobalt	4.4 B	5.0	mg/kg		SW846 6010B	10/05/01	ELG2R1AW
		Dilution Factor: 1			Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.10	
Copper	14.8	2.5	mg/kg		SW846 6010B	10/05/01	ELG2R1AX
		Dilution Factor: 1			Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.40	
Molybdenum	ND	4.0	mg/kg		SW846 6010B	10/05/01	ELG2R1AO
		Dilution Factor: 1			Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.30	
Nickel	8.4	4.0	mg/kg		SW846 6010B	10/05/01	ELG2R1AI
		Dilution Factor: 1			Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg		SW846 6010B	10/05/01	ELG2R1A2
		Dilution Factor: 1			Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.80	
Vanadium	20.9	5.0	mg/kg		SWB46 6010B	10/05/01	ELG2R1AA
		Dilution Factor: 1			Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.10	
Zinc	56.8	2.0	mg/kg		SW846 6010B	10/05/01	ELG2R1AC
		Dilution Factor: 1			Analysis Time...: 22:49	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 1.0	
Prep Batch #....: 1278216							
Mercury	ND	0.10	mg/kg		SW846 7471A	10/05/01	ELG2R1AD
		Dilution Factor: 1			Analysis Time...: 14:05	Analyst ID.....: 0000238	
		Instrument ID...: M04			MS Run #.....: 1278099	MDL.....: 0.020	

NOTE (S) :

B Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_2

TOTAL Metals

Lot-Sample #....: E1J030176-004
 Date Sampled....: 10/02/01 19:00 Date Received...: 10/02/01 21:30 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....:	1278213					
Aluminum	19600	20.0	mg/kg	SW846 6010B	10/05/01	ELG2T1AK
		Dilution Factor: 1		Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 8.0	
Arsenic	5.4	1.0	mg/kg	SW846 6010B	10/05/01	ELG2T1AL
		Dilution Factor: 1		Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.40	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/05/01	ELG2T1AM
		Dilution Factor: 1		Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.60	
Barium	121	2.0	mg/kg	SW846 6010B	10/05/01	ELG2T1AN
		Dilution Factor: 1		Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/05/01	ELG2T1AP
		Dilution Factor: 1		Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.060	
Chromium	24.4	1.0	mg/kg	SW846 6010B	10/05/01	ELG2T1AQ
		Dilution Factor: 1		Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.10	
Beryllium	0.74	0.50	mg/kg	SW846 6010B	10/05/01	ELG2T1AR
		Dilution Factor: 1		Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.050	
Lead	8.1	0.50	mg/kg	SW846 6010B	10/05/01	ELG2T1AT
		Dilution Factor: 1		Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.30	
Selenium	0.57	0.50	mg/kg	SW846 6010B	10/05/01	ELG2T1AU
		Dilution Factor: 1		Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/05/01	ELG2T1AV
		Dilution Factor: 1		Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01		MS Run #.....: 1278098	MDL.....: 0.10	

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HALEY & ALDRICH INC

Client Sample ID: SP_23_100201_2

TOTAL Metals

Lot-Sample #....: E1J030176-004

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS				
Cobalt	9.1	5.0	mg/kg		SW846 6010B	10/05/01	ELG2T1AW
		Dilution Factor: 1			Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.10	
Copper	23.3	2.5	mg/kg		SW846 6010B	10/05/01	ELG2T1AX
		Dilution Factor: 1			Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.40	
Molybdenum	ND	4.0	mg/kg		SW846 6010B	10/05/01	ELG2T1AO
		Dilution Factor: 1			Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.30	
Nickel	17.4	4.0	mg/kg		SW846 6010B	10/05/01	ELG2T1AI
		Dilution Factor: 1			Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg		SW846 6010B	10/05/01	ELG2T1A2
		Dilution Factor: 1			Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.80	
Vanadium	45.8	5.0	mg/kg		SW846 6010B	10/05/01	ELG2T1AA
		Dilution Factor: 1			Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 0.10	
Zinc	150	2.0	mg/kg		SW846 6010B	10/05/01	ELG2T1AC
		Dilution Factor: 1			Analysis Time...: 22:57	Analyst ID.....: 0210888	
		Instrument ID...: M01			MS Run #.....: 1278098	MDL.....: 1.0	
Prep Batch #....:	1278216						
Mercury	0.040 B	0.10	mg/kg		SW846 7471A	10/05/01	ELG2T1AD
		Dilution Factor: 1			Analysis Time...: 14:07	Analyst ID.....: 0000238	
		Instrument ID...: M04			MS Run #.....: 1278099	MDL.....: 0.020	

NOTE(S):

B Estimated result. Result is less than RL.

SEVERN
TRENT
SERVICES

QA/QC

QC DATA ASSOCIATION SUMMARY

E1J030176

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	SW846 8015B		1277315	1277146
	SOLID	SW846 8015B		1278360	1278202
	SOLID	SW846 7471A		1278216	1278099
	SOLID	SW846 8260B		1281439	1281228
	SOLID	SW846 8270C		1277539	1277294
	SOLID	SW846 6010B		1277280	1277128
002	SOLID	SW846 8015B		1277315	1277146
	SOLID	SW846 8015B		1278360	1278202
	SOLID	SW846 7471A		1278216	1278099
	SOLID	SW846 8260B		1281439	1281228
	SOLID	SW846 8270C		1277539	1277294
	SOLID	SW846 6010B		1278213	1278098
003	SOLID	SW846 8015B		1277315	1277146
	SOLID	SW846 8015B		1278360	1278202
	SOLID	SW846 7471A		1278216	1278099
	SOLID	SW846 8260B		1281436	1281224
	SOLID	SW846 8270C		1277539	1277294
	SOLID	SW846 6010B		1278213	1278098
004	SOLID	SW846 8015B		1277315	1277146
	SOLID	SW846 8015B		1278359	
	SOLID	SW846 7471A		1278216	1278099
	SOLID	SW846 8260B		1281436	1281224
	SOLID	SW846 8270C		1284523	1284264
	SOLID	SW846 6010B		1278213	1278098

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E1J030176 Work Order #...: ELKAM1AA Matrix.....: SOLID
 MB Lot-Sample #: E1J040000-315
 Analysis Date...: 10/05/01 Prep Date.....: 10/04/01 Analysis Time...: 02:46
 Dilution Factor: 1 Prep Batch #: 1277315 Instrument ID.: G02
 Analyst ID.....: 356074

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	METHOD
C8-C9	ND	10	mg/kg	SW846 8015B
C10-C11	ND	10	mg/kg	SW846 8015B
C12-C13	ND	10	mg/kg	SW846 8015B
C14-C15	ND	10	mg/kg	SW846 8015B
C16-C17	ND	10	mg/kg	SW846 8015B
C18-C19	ND	10	mg/kg	SW846 8015B
C20-C23	ND	10	mg/kg	SW846 8015B
C24-C27	ND	10	mg/kg	SW846 8015B
C28-C31	ND	10	mg/kg	SW846 8015B
C32-C35	ND	10	mg/kg	SW846 8015B
C36-C39	ND	10	mg/kg	SW846 8015B
C40+	ND	10	mg/kg	SW846 8015B
Total Carbon Chain Range	ND	10	mg/kg	SW846 8015B
SURROGATE	PERCENT	RECOVERY		
	RECOVERY	LIMITS		
Benzo(a)pyrene	91	(60 - 130)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: E1J030176	Work Order #....: ELLJD1AA	Matrix.....: SOLID
MB Lot-Sample #: E1J040000-539		
Analysis Date...: 10/11/01	Prep Date.....: 10/04/01	Analysis Time..: 09:22
Dilution Factor: 1	Prep Batch #: 1277539	Instrument ID.: MSI
		Analyst ID.....: 010060

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acenaphthene	ND	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	330	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Benzoic acid	ND	1600	ug/kg	SW846 8270C
Benzyl alcohol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethyl)- ether	ND	330	ug/kg	SW846 8270C
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270C
Carbazole	ND	330	ug/kg	SW846 8270C
4-Chloroaniline	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270C
Dibenzofuran	ND	330	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270C
Diethyl phthalate	ND	330	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270C
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: E1J030176

Work Order #....: ELLJD1AA

Matrix.....: SOLID

<u>PARAMETER</u>	<u>REPORTING</u>			<u>METHOD</u>
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	
4,6-Dinitro-	ND	1600	ug/kg	SW846 8270C
2-methylphenol				
2,4-Dinitrophenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
Hexachlorobenzene	ND	330	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270C
Hexachlorocyclopenta-	ND	1600	ug/kg	SW846 8270C
diene				
Hexachloroethane	ND	330	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C
Isophorone	ND	330	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270C
2-Methylphenol	ND	330	ug/kg	SW846 8270C
3-Methylphenol &	ND	330	ug/kg	SW846 8270C
4-Methylphenol				
Naphthalene	ND	330	ug/kg	SW846 8270C
2-Nitroaniline	ND	1600	ug/kg	SW846 8270C
3-Nitroaniline	ND	1600	ug/kg	SW846 8270C
4-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Nitrobenzene	ND	330	ug/kg	SW846 8270C
2-Nitrophenol	ND	330	ug/kg	SW846 8270C
4-Nitrophenol	ND	1600	ug/kg	SW846 8270C
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosodi-n-propyl-	ND	330	ug/kg	SW846 8270C
amine				
Pentachlorophenol	ND	1600	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Phenol	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
1,2,4-Trichloro-	ND	330	ug/kg	SW846 8270C
benzene				
2,4,5-Trichloro-	ND	330	ug/kg	SW846 8270C
phenol				
2,4,6-Trichloro-	ND	330	ug/kg	SW846 8270C
phenol				
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>	
2-Fluorobiphenyl	81	(40 - 130)		
2-Fluorophenol	90	(50 - 115)		
2,4,6-Tribromophenol	98	(30 - 115)		

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: E1J030176 Work Order #....: ELLJD1AA Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Nitrobenzene-d5	77	(45 - 115)		
Phenol-d5	94	(50 - 120)		
Terphenyl-d14	97	(50 - 140)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E1J030176 Work Order #...: ELNC81AA Matrix.....: SOLID
MB Lot-Sample #: E1J050000-359 Prep Date.....: 10/05/01 Analysis Time..: 08:03
Analysis Date...: 10/05/01 Prep Batch #: 1278359 Instrument ID..: G15
Dilution Factor: 1 Analyst ID.....: 001464

PARAMETER	REPORTING			METHOD
	RESULT	LIMIT	UNITS	
C6-C8	7.4 J	10	mg/kg	SW846 8015B
PERCENT RECOVERY			RECOVERY LIMITS	
SURROGATE	99			(60 - 130)
a,a,a-Trifluorotoluene (TFT)				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

Unknown hydrocarbon

METHOD BLANK REPORT

GC Volatiles

Client Lot #....: E1J030176 Work Order #....: ELNDF1AA Matrix.....: SOLID
MB Lot-Sample #: E1J050000-360 Prep Date.....: 10/04/01 Analysis Time...: 16:51
Analysis Date...: 10/04/01 Prep Batch #....: 1278360 Instrument ID...: G15
Dilution Factor: 1 Analyst ID.....: 001464

PARAMETER	REPORTING			METHOD
	RESULT	LIMIT	UNITS	
C6-C8	ND	1.0	mg/kg	SWB46 8015B
SURROGATE	PERCENT	RECOVERY		
a, a, a-Trifluorotoluene (TFT)	RECOVERY	LIMITS		
	71	(60 - 130)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1J030176 Work Order #...: ELRED1AA Matrix.....: SOLID
 MB Lot-Sample #: E1J080000-436 Prep Date.....: 10/04/01 Analysis Time.: 18:59
 Analysis Date..: 10/04/01 Prep Batch #: 1281436 Instrument ID.: MSD
 Dilution Factor: 1 Analyst ID....: 999998

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dichlorodifluoromethane	ND	500	ug/kg	SW846 8260B
Chloromethane	ND	500	ug/kg	SW846 8260B
Vinyl chloride	ND	500	ug/kg	SW846 8260B
Bromomethane	ND	500	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	250	ug/kg	SW846 8260B
Chloroethane	ND	500	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	500	ug/kg	SW846 8260B
Acrolein	ND	5000	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	250	ug/kg	SW846 8260B
Iodomethane	ND	500	ug/kg	SW846 8260B
Acetone	ND	1200	ug/kg	SW846 8260B
Carbon disulfide	ND	250	ug/kg	SW846 8260B
Methylene chloride	ND	250	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
Acrylonitrile	ND	5000	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	250	ug/kg	SW846 8260B
Vinyl acetate	ND	500	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
2-Butanone	ND	1200	ug/kg	SW846 8260B
Bromochloromethane	ND	250	ug/kg	SW846 8260B
Chloroform	ND	250	ug/kg	SW846 8260B
Tetrahydrofuran	ND	1000	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	250	ug/kg	SW846 8260B
Carbon tetrachloride	ND	250	ug/kg	SW846 8260B
Benzene	ND	250	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	250	ug/kg	SW846 8260B
Trichloroethene	ND	250	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
Bromodichloromethane	ND	250	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	500	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	1200	ug/kg	SW846 8260B
Toluene	ND	250	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	250	ug/kg	SW846 8260B
Tetrachloroethene	ND	250	ug/kg	SW846 8260B
2-Hexanone	ND	1200	ug/kg	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: E1J030176

Work Order #...: ELRED1AA

Matrix.....: SOLID

<u>PARAMETER</u>	REPORTING			<u>METHOD</u>
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	
Dibromochloromethane	ND	250	ug/kg	SW846 8260B
Chlorobenzene	ND	250	ug/kg	SW846 8260B
Ethylbenzene	ND	250	ug/kg	SW846 8260B
Xylenes (total)	ND	250	ug/kg	SW846 8260B
Styrene	ND	500	ug/kg	SW846 8260B
Bromoform	ND	250	ug/kg	SW846 8260B
Isopropylbenzene	ND	250	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	250	ug/kg	SW846 8260B
Bromobenzene	ND	250	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	250	ug/kg	SW846 8260B
n-Propylbenzene	ND	250	ug/kg	SW846 8260B
2-Chlorotoluene	ND	250	ug/kg	SW846 8260B
4-Chlorotoluene	ND	250	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	250	ug/kg	SW846 8260B
tert-Butylbenzene	ND	250	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	250	ug/kg	SW846 8260B
sec-Butylbenzene	ND	250	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
n-Butylbenzene	ND	250	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	500	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	250	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	250	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	250	ug/kg	SW846 8260B
t-Butanol	ND	5000	ug/kg	SW846 8260B
Isopropyl ether	ND	500	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	500	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	500	ug/kg	SW846 8260B
<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY		
	<u>RECOVERY</u>	<u>LIMITS</u>		
Bromofluorobenzene	99	(60 - 140)		
1,2-Dichloroethane-d4	91	(60 - 140)		
Toluene-d8	102	(60 - 140)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1J030176
MB Lot-Sample #: E1J080000-439

Analysis Date...: 10/04/01
Dilution Factor: 1

Work Order #...: ELRE61AA

Prep Date.....: 10/04/01
Prep Batch #: 1281439

Matrix.....: SOLID

Analysis Time.: 14:06
Instrument ID.: MSD

Analyst ID....: 999998

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
1, 2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Acrolein	ND	100	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	10	ug/kg	SW846 8260B
Acetone	ND	25	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Vinyl acetate	ND	10	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	25	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Tetrahydrofuran	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1, 2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1, 2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	25	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	25	ug/kg	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: E1J030176

Work Order #....: ELRE61AA

Matrix.....: SOLID

<u>PARAMETER</u>	REPORTING			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	10	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro- propane	ND	10	ug/kg	SW846 8260B
1,2,4-Trichloro- benzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
t-Butanol	ND	100	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B
<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY		
	<u>RECOVERY</u>	<u>LIMITS</u>		
Bromofluorobenzene	96	(70 - 130)		
1,2-Dichloroethane-d4	72	(60 - 140)		
Toluene-d8	87	(70 - 130)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: E1J030176
 MB Lot-Sample #: E1J110000-523
 Analysis Date...: 10/15/01
 Dilution Factor: 1

Work Order #...: EL1X71AA
 Prep Date.....: 10/11/01
 Prep Batch #: 1284523
 Analyst ID....: 010060

Matrix.....: SOLID
 Analysis Time..: 11:46
 Instrument ID..: MSI

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	330	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Benzoic acid	ND	1600	ug/kg	SW846 8270C
Benzyl alcohol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethyl)- ether	ND	330	ug/kg	SW846 8270C
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270C
Carbazole	ND	330	ug/kg	SW846 8270C
4-Chloroaniline	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270C
Dibenzofuran	ND	330	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270C
Diethyl phthalate	ND	330	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270C
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: E1J030176 Work Order #...: EL1X71AA Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING			<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>		
4,6-Dinitro-	ND	1600	ug/kg	SW846 8270C	
2-methylphenol					
2,4-Dinitrophenol	ND	1600	ug/kg	SW846 8270C	
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270C	
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270C	
Di-n-octyl phthalate	ND	330	ug/kg	SW846 8270C	
Fluoranthene	ND	330	ug/kg	SW846 8270C	
Fluorene	ND	330	ug/kg	SW846 8270C	
Hexachlorobenzene	ND	330	ug/kg	SW846 8270C	
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270C	
Hexachlorocyclopenta-diene	ND	1600	ug/kg	SW846 8270C	
Hexachloroethane	ND	330	ug/kg	SW846 8270C	
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C	
Isophorone	ND	330	ug/kg	SW846 8270C	
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270C	
2-Methylphenol	ND	330	ug/kg	SW846 8270C	
3-Methylphenol &	ND	330	ug/kg	SW846 8270C	
4-Methylphenol					
Naphthalene	ND	330	ug/kg	SW846 8270C	
2-Nitroaniline	ND	1600	ug/kg	SW846 8270C	
3-Nitroaniline	ND	1600	ug/kg	SW846 8270C	
4-Nitroaniline	ND	1600	ug/kg	SW846 8270C	
Nitrobenzene	ND	330	ug/kg	SW846 8270C	
2-Nitrophenol	ND	330	ug/kg	SW846 8270C	
4-Nitrophenol	ND	1600	ug/kg	SW846 8270C	
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270C	
N-Nitrosodi-n-propyl-amine	ND	330	ug/kg	SW846 8270C	
Pentachlorophenol	ND	1600	ug/kg	SW846 8270C	
Phenanthrene	ND	330	ug/kg	SW846 8270C	
Phenol	ND	330	ug/kg	SW846 8270C	
Pyrene	ND	330	ug/kg	SW846 8270C	
1,2,4-Trichlorobenzene	ND	330	ug/kg	SW846 8270C	
2,4,5-Trichlorophenol	ND	330	ug/kg	SW846 8270C	
2,4,6-Trichlorophenol	ND	330	ug/kg	SW846 8270C	
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>		
		<u>RECOVERY</u>	<u>LIMITS</u>		
2-Fluorobiphenyl		67	(40 - 130)		
2-Fluorophenol		61	(50 - 115)		
2,4,6-Tribromophenol		64	(30 - 115)		

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: ELJ030176 Work Order #....: EL1X71AA Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
Nitrobenzene-d5	47	(45 - 115)			
Phenol-d5	62	(50 - 120)			
Terphenyl-d14	63	(50 - 140)			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: ELJ030176

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: ELJ040000-280 Prep Batch #...: 1277280						
Aluminum	14.7 B	20.0	mg/kg	SW846 6010B	10/04/01	ELJ1T1AA
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 021088	Instrument ID...: M01	
Arsenic	ND	1.0	mg/kg	SW846 6010B	10/04/01	ELJ1T1AC
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 021088	Instrument ID...: M01	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/04-10/05/01	ELJ1T1AD
		Dilution Factor: 1				
		Analysis Time...: 14:29		Analyst ID.....: 021088	Instrument ID...: M01	
Barium	ND	2.0	mg/kg	SW846 6010B	10/04/01	ELJ1T1AE
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 021088	Instrument ID...: M01	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/04/01	ELJ1T1AF
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 021088	Instrument ID...: M01	
Chromium	0.12 B	1.0	mg/kg	SW846 6010B	10/04/01	ELJ1T1AG
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 021088	Instrument ID...: M01	
Beryllium	ND	0.50	mg/kg	SW846 6010B	10/04/01	ELJ1T1AH
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 021088	Instrument ID...: M01	
Lead	ND	0.50	mg/kg	SW846 6010B	10/04/01	ELJ1T1AJ
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 021088	Instrument ID...: M01	
Selenium	ND	0.50	mg/kg	SW846 6010B	10/04/01	ELJ1T1AK
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 021088	Instrument ID...: M01	
Silver	ND	1.0	mg/kg	SW846 6010B	10/04/01	ELJ1T1AL
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 021088	Instrument ID...: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B	10/04/01	ELJ1T1AM
		Dilution Factor: 1				
		Analysis Time...: 20:19		Analyst ID.....: 021088	Instrument ID...: M01	

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E1J030176

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Copper	ND	2.5	mg/kg	SW846 6010B		10/04/01	ELJ1T1AN
		Dilution Factor: 1					
		Analysis Time...: 20:19		Analyst ID.....: 021088		Instrument ID...: M01	
Molybdenum	ND	4.0	mg/kg	SW846 6010B		10/04/01	ELJ1T1AP
		Dilution Factor: 1					
		Analysis Time...: 20:19		Analyst ID.....: 021088		Instrument ID...: M01	
Nickel	ND	4.0	mg/kg	SW846 6010B		10/04/01	ELJ1T1AQ
		Dilution Factor: 1					
		Analysis Time...: 20:19		Analyst ID.....: 021088		Instrument ID...: M01	
Thallium	ND	1.0	mg/kg	SW846 6010B		10/04/01	ELJ1T1AR
		Dilution Factor: 1					
		Analysis Time...: 20:19		Analyst ID.....: 021088		Instrument ID...: M01	
Vanadium	ND	5.0	mg/kg	SW846 6010B		10/04/01	ELJ1T1AT
		Dilution Factor: 1					
		Analysis Time...: 20:19		Analyst ID.....: 021088		Instrument ID...: M01	
Zinc	ND	2.0	mg/kg	SW846 6010B		10/04/01	ELJ1T1AU
		Dilution Factor: 1					
		Analysis Time...: 20:19		Analyst ID.....: 021088		Instrument ID...: M01	

MB Lot-Sample #: E1J050000-213 Prep Batch #: 1278213

Aluminum	ND	20.0	mg/kg	SW846 6010B		10/05/01	ELL8D1AD
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Arsenic	ND	1.0	mg/kg	SW846 6010B		10/05/01	ELL8D1AE
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Antimony	ND	6.0	mg/kg	SW846 6010B		10/05/01	ELL8D1AF
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Barium	ND	2.0	mg/kg	SW846 6010B		10/05/01	ELL8D1AG
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Cadmium	ND	0.50	mg/kg	SW846 6010B		10/05/01	ELL8D1AH
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: E1J030176

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
Chromium	ND	1.0	mg/kg	SW846 6010B	10/05/01		ELL8D1AJ
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Beryllium	ND	0.50	mg/kg	SW846 6010B	10/05/01		ELL8D1AK
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Lead	ND	0.50	mg/kg	SW846 6010B	10/05/01		ELL8D1AL
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Selenium	ND	0.50	mg/kg	SW846 6010B	10/05/01		ELL8D1AM
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Silver	ND	1.0	mg/kg	SW846 6010B	10/05/01		ELL8D1AN
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B	10/05/01		ELL8D1AP
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Copper	ND	2.5	mg/kg	SW846 6010B	10/05/01		ELL8D1AQ
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Molybdenum	ND	4.0	mg/kg	SW846 6010B	10/05/01		ELL8D1AR
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Nickel	ND	4.0	mg/kg	SW846 6010B	10/05/01		ELL8D1AT
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Thallium	ND	1.0	mg/kg	SW846 6010B	10/05/01		ELL8D1AU
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Vanadium	ND	5.0	mg/kg	SW846 6010B	10/05/01		ELL8D1AA
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	
Zinc	ND	2.0	mg/kg	SW846 6010B	10/05/01		ELL8D1AC
		Dilution Factor: 1					
		Analysis Time...: 21:43		Analyst ID.....: 021088		Instrument ID...: M01	

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E1J030176

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING			<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>	<u>ANALYSIS DATE</u>			
MB Lot-Sample #:	ELJ050000-216	Prep Batch #...:	1278216				
Mercury	ND	0.10	mg/kg	SW846 7471A		10/05/01	ELL8H1AA
		Dilution Factor:	1				
		Analysis Time..:	13:55	Analyst ID....:	000023	Instrument ID..:	M04

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: E1J030176 Work Order #....: ELNC81AC-LCS Matrix.....: SOLID
 LCS Lot-Sample#: E1J050000-359 ELNC81AD-LCSD
 Prep Date.....: 10/05/01 Analysis Date...: 10/05/01
 Prep Batch #...: 1278359 Analysis Time..: 07:10
 Dilution Factor: 1 Instrument ID...: G15
 Analyst ID.....: 001464

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>		<u>PERCENT</u>	<u>RPD</u>	<u>METHOD</u>	
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>			
TPH (as Gasoline)	50.0	59.5	mg/kg	119		SW846 8015B	
	50.0	62.8	mg/kg	126	5.4	SW846 8015B	
<u>SURROGATE</u>			<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>		
			<u>RECOVERY</u>	<u>LIMITS</u>			
a,a,a-Trifluorotoluene (TFT)			126	(60 - 130)			
			128	(60 - 130)			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: E1J030176 Work Order #....: ELNC81AC-LCS Matrix.....: SOLID
LCS Lot-Sample#: E1J050000-359 ELNC81AD-LCSD
Prep Date.....: 10/05/01 Analysis Date..: 10/05/01
Prep Batch #....: 1278359 Analysis Time..: 07:10
Dilution Factor: 1 Instrument ID.: G15
Analyst ID.....: 001464

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
TPH (as Gasoline)	119	(80 - 140)			SW846 8015B
	126	(80 - 140)	5.4	(0-40)	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
a,a,a-Trifluorotoluene (TFT)	126	(60 - 130)
	128	(60 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1J030176 **Work Order #....:** ELKAM1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1J040000-315
Prep Date.....: 10/04/01 **Analysis Date..:** 10/05/01
Prep Batch #....: 1277315 **Analysis Time..:** 03:25
Dilution Factor: 1 **Instrument ID..:** G02
Analyst ID.....: 356074

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	
TPH (as Diesel)	250	235	94	SW846 8015B
SURROGATE		<u>PERCENT</u>	<u>RECOVERY</u>	
Benzo (a) pyrene		<u>RECOVERY</u>	<u>LIMITS</u>	
		86	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: E1J030176 Work Order #....: ELLJD1AC Matrix.....: SOLID
 LCS Lot-Sample#: E1J040000-539
 Prep Date.....: 10/04/01 Analysis Date..: 10/11/01
 Prep Batch #....: 1277539 Analysis Time..: 00:18
 Dilution Factor: 1 Instrument ID...: MSI
 Analyst ID.....: 010060

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	<u>METHOD</u>
Acenaphthene	3330	2820	85	SW846 8270C
4-Chloro-3-methylphenol	5000	3800	76	SW846 8270C
2-Chlorophenol	5000	3830	77	SW846 8270C
1,4-Dichlorobenzene	3330	2190	66	SW846 8270C
2,4-Dinitrotoluene	3330	3180	95	SW846 8270C
4-Nitrophenol	5000	3610	72	SW846 8270C
N-Nitrosodi-n-propyl- amine	3330	2280	68	SW846 8270C
Pentachlorophenol	5000	2890	58	SW846 8270C
Phenol	5000	3160	63	SW846 8270C
Pyrene	3330	3780	114	SW846 8270C
1,2,4-Trichloro- benzene	3330	2480	74	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
2-Fluorobiphenyl	73	(40 - 130)
2-Fluorophenol	68	(50 - 115)
2,4,6-Tribromophenol	46	(30 - 115)
Nitrobenzene-d5	63	(45 - 115)
Phenol-d5	68	(50 - 120)
Terphenyl-d14	100	(50 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: E1J030176 Work Order #....: ELNDF1AC Matrix.....: SOLID
LCS Lot-Sample#: E1J050000-360
Prep Date.....: 10/04/01 Analysis Date...: 10/04/01
Prep Batch #....: 1278360 Analysis Time..: 20:16
Dilution Factor: 1 Instrument ID..: G15
Analyst ID.....: 001464

PARAMETER	SPIKE	MEASURED	UNITS	PERCENT	METHOD
	AMOUNT	AMOUNT		RECOVERY	
TPH (as Gasoline)	5.00	4.32	mg/kg	86	SW846 8015B
SURROGATE		PERCENT		RECOVERY	
a,a,a-Trifluorotoluene (TFT)		RECOVERY		LIMITS	
		98		(60 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E1J030176 Work Order #....: ELRED1AC Matrix.....: SOLID
 LCS Lot-Sample#: E1J080000-436
 Prep Date.....: 10/04/01 Analysis Date...: 10/04/01
 Prep Batch #....: 1281436 Analysis Time...: 17:56
 Dilution Factor: 1 Instrument ID...: MSD
 Analyst ID.....: 999998

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	
1,1-Dichloroethene	2500	2170	87	SW846 8260B
Benzene	2500	2340	94	SW846 8260B
Trichloroethene	2500	2320	93	SW846 8260B
Toluene	2500	2260	91	SW846 8260B
Chlorobenzene	2500	2240	90	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	98	(60 - 140)
1,2-Dichloroethane-d4	96	(60 - 140)
Toluene-d8	102	(60 - 140)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E1J030176 Work Order #....: ELRE61AC Matrix.....: SOLID
 LCS Lot-Sample#: E1J080000-439
 Prep Date.....: 10/04/01 Analysis Date...: 10/04/01
 Prep Batch #....: 1281439 Analysis Time...: 09:34
 Dilution Factor: 1 Instrument ID.: MSD
 Analyst ID.....: 999998

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>UNITS</u>	<u>PERCENT</u>	<u>METHOD</u>
1,1-Dichloroethene	50.0	50.6	ug/kg	101	SW846 8260B
Benzene	50.0	54.2	ug/kg	108	SW846 8260B
Trichloroethene	50.0	55.8	ug/kg	112	SW846 8260B
Toluene	50.0	51.9	ug/kg	104	SW846 8260B
Chlorobenzene	50.0	48.8	ug/kg	98	SW846 8260B
<u>SURROGATE</u>		<u>AMOUNT</u>		<u>RECOVERY</u>	
Bromofluorobenzene		97		(70 - 130)	
1,2-Dichloroethane-d4		80		(60 - 140)	
Toluene-d8		90		(70 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: E1J030176 Work Order #....: EL1X71AC Matrix.....: SOLID
 LCS Lot-Sample#: E1J110000-523
 Prep Date.....: 10/11/01 Analysis Date..: 10/15/01
 Prep Batch #:...: 1284523 Analysis Time..: 12:48
 Dilution Factor: 1 Instrument ID..: MSI
 Analyst ID.....: 010060

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	<u>METHOD</u>
Acenaphthene	3330	3160	95	SW846 8270C
4-Chloro-3-methylphenol	5000	3660	73	SW846 8270C
2-Chlorophenol	5000	3770	75	SW846 8270C
1,4-Dichlorobenzene	3330	2190	66	SW846 8270C
2,4-Dinitrotoluene	3330	3590	108	SW846 8270C
4-Nitrophenol	5000	3680	74	SW846 8270C
N-Nitrosodi-n-propyl-amine	3330	2200	66	SW846 8270C
Pentachlorophenol	5000	3610	72	SW846 8270C
Phenol	5000	3260	65	SW846 8270C
Pyrene	3330	2470	74	SW846 8270C
1,2,4-Trichloro-benzene	3330	2440	73	SW846 8270C
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>	
2-Fluorobiphenyl		87	(40 - 130)	
2-Fluorophenol		74	(50 - 115)	
2,4,6-Tribromophenol		90	(30 - 115)	
Nitrobenzene-d5		72	(45 - 115)	
Phenol-d5		70	(50 - 120)	
Terphenyl-d14		76	(50 - 140)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: ELJ030176						Matrix.....: SOLID
PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	PREPARATION-METHOD	WORK ANALYSIS DATE ORDER #
LCS Lot-Sample#: E1J040000-280 Prep Batch #....: 1277280						
Aluminum	200	179	mg/kg	90	SW846 6010B Dilution Factor: 1 Analysis Time.: 20:26	10/04/01 ELJ1T1AV Analyst ID.....: 021088 Instrument ID..: M01
Arsenic	200	175	mg/kg	88	SW846 6010B Dilution Factor: 1 Analysis Time.: 20:26	10/04/01 ELJ1T1AW Analyst ID.....: 021088 Instrument ID..: M01
Antimony	50.0	46.1	mg/kg	92	SW846 6010B Dilution Factor: 1 Analysis Time.: 14:16	10/04-10/05/01 ELJ1T1AX Analyst ID.....: 021088 Instrument ID..: M01
Barium	200	202	mg/kg	101	SW846 6010B Dilution Factor: 1 Analysis Time.: 20:26	10/04/01 ELJ1T1AO Analyst ID.....: 021088 Instrument ID..: M01
Cadmium	5.00	4.81	mg/kg	96	SW846 6010B Dilution Factor: 1 Analysis Time.: 20:26	10/04/01 ELJ1T1A1 Analyst ID.....: 021088 Instrument ID..: M01
Chromium	20.0	19.5	mg/kg	98	SW846 6010B Dilution Factor: 1 Analysis Time.: 20:26	10/04/01 ELJ1T1A2 Analyst ID.....: 021088 Instrument ID..: M01
Beryllium	5.00	4.79	mg/kg	96	SW846 6010B Dilution Factor: 1 Analysis Time.: 20:26	10/04/01 ELJ1T1A3 Analyst ID.....: 021088 Instrument ID..: M01
Lead	50.0	44.3	mg/kg	89	SW846 6010B Dilution Factor: 1 Analysis Time.: 20:26	10/04/01 ELJ1T1A4 Analyst ID.....: 021088 Instrument ID..: M01
Selenium	200	161	mg/kg	81	SW846 6010B Dilution Factor: 1 Analysis Time.: 20:26	10/04/01 ELJ1T1A5 Analyst ID.....: 021088 Instrument ID..: M01
Silver	5.00	4.47	mg/kg	89	SW846 6010B Dilution Factor: 1 Analysis Time.: 20:26	10/04/01 ELJ1T1A6 Analyst ID.....: 021088 Instrument ID..: M01

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1J030176

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Cobalt	50.0	47.0	mg/kg	94	SW846 6010B	10/04/01	ELJ1T1A7
			Dilution Factor: 1				
			Analysis Time...: 20:26		Analyst ID.....: 021088	Instrument ID...: M01	
Copper	25.0	23.9	mg/kg	96	SW846 6010B	10/04/01	ELJ1T1A8
			Dilution Factor: 1				
			Analysis Time...: 20:26		Analyst ID.....: 021088	Instrument ID...: M01	
Molybdenum	100	93.7	mg/kg	94	SW846 6010B	10/04/01	ELJ1T1A9
			Dilution Factor: 1				
			Analysis Time...: 20:26		Analyst ID.....: 021088	Instrument ID...: M01	
Nickel	50.0	49.0	mg/kg	98	SW846 6010B	10/04/01	ELJ1T1CA
			Dilution Factor: 1				
			Analysis Time...: 20:26		Analyst ID.....: 021088	Instrument ID...: M01	
Thallium	200	174	mg/kg	87	SW846 6010B	10/04/01	ELJ1T1CC
			Dilution Factor: 1				
			Analysis Time...: 20:26		Analyst ID.....: 021088	Instrument ID...: M01	
Vanadium	50.0	48.1	mg/kg	96	SW846 6010B	10/04/01	ELJ1T1CD
			Dilution Factor: 1				
			Analysis Time...: 20:26		Analyst ID.....: 021088	Instrument ID...: M01	
Zinc	50.0	46.3	mg/kg	93	SW846 6010B	10/04/01	ELJ1T1CE
			Dilution Factor: 1				
			Analysis Time...: 20:26		Analyst ID.....: 021088	Instrument ID...: M01	
LCS Lot-Sample#:	E1J050000-213	Prep Batch #...:	1278213				
Aluminum	200	181	mg/kg	90	SW846 6010B	10/05/01	ELL8D1AX
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Arsenic	200	192	mg/kg	96	SW846 6010B	10/05/01	ELL8D1AO
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Antimony	50.0	45.5	mg/kg	91	SW846 6010B	10/05/01	ELL8D1A1
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Barium	200	198	mg/kg	99	SW846 6010B	10/05/01	ELL8D1A2
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J030176						Matrix.....: SOLID	
PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVR	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Cadmium	5.00	5.04	mg/kg	101	SW846 6010B	10/05/01	ELL8D1A3
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Chromium	20.0	21.3	mg/kg	107	SW846 6010B	10/05/01	ELL8D1A4
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Beryllium	5.00	5.20	mg/kg	104	SW846 6010B	10/05/01	ELL8D1A5
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Lead	50.0	47.3	mg/kg	95	SW846 6010B	10/05/01	ELL8D1A6
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Selenium	200	180	mg/kg	90	SW846 6010B	10/05/01	ELL8D1A7
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Silver	5.00	4.92	mg/kg	98	SW846 6010B	10/05/01	ELL8D1A8
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Cobalt	50.0	50.8	mg/kg	102	SW846 6010B	10/05/01	ELL8D1A9
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Copper	25.0	24.1	mg/kg	96	SW846 6010B	10/05/01	ELL8D1CA
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Molybdenum	100	98.5	mg/kg	98	SW846 6010B	10/05/01	ELL8D1CC
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Nickel	50.0	51.8	mg/kg	104	SW846 6010B	10/05/01	ELL8D1CD
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Thallium	200	184	mg/kg	92	SW846 6010B	10/05/01	ELL8D1CE
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1J030176

Matrix.....: SOLID

PARAMETER	SPIKE	MEASURED	PERCNT		METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
	AMOUNT	AMOUNT	UNITS	RECVRY			
Vanadium	50.0	51.7	mg/kg	103	SW846 6010B	10/05/01	ELL8D1AV
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
Zinc	50.0	51.1	mg/kg	102	SW846 6010B	10/05/01	ELL8D1AW
			Dilution Factor: 1				
			Analysis Time...: 21:49		Analyst ID.....: 021088	Instrument ID...: M01	
LCS Lot-Sample#:	E1J050000-216		Prep Batch #...:	1278216			
Mercury	0.833	0.840	mg/kg	101	SW846 7471A	10/05/01	ELL8H1AC
			Dilution Factor: 1				
			Analysis Time...: 13:57		Analyst ID.....: 000023	Instrument ID...: M04	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E1J030176 Work Order #...: ELKAM1AC Matrix.....: SOLID
LCS Lot-Sample#: E1J040000-315
Prep Date....: 10/04/01 Analysis Date...: 10/05/01
Prep Batch #:...: 1277315 Analysis Time...: 03:25
Dilution Factor: 1 Instrument ID...: G02
Analyst ID....: 356074

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Diesel)	94	(60 - 130)	SW846 8015B
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Benzo (a) pyrene	86	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #....: E1J030176 Work Order #....: ELLJD1AC Matrix.....: SOLID
 LCS Lot-Sample#: E1J040000-539
 Prep Date.....: 10/04/01 Analysis Date..: 10/11/01
 Prep Batch #....: 1277539 Analysis Time..: 00:18
 Dilution Factor: 1 Instrument ID..: MSI
 Analyst ID.....: 010060

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
Acenaphthene	85	(50 - 125)	SW846 8270C
4-Chloro-3-methylphenol	76	(50 - 110)	SW846 8270C
2-Chlorophenol	77	(50 - 120)	SW846 8270C
1, 4-Dichlorobenzene	66	(40 - 115)	SW846 8270C
2, 4-Dinitrotoluene	95	(40 - 120)	SW846 8270C
4-Nitrophenol	72	(10 - 120)	SW846 8270C
N-Nitrosodi-n-propyl- amine	68	(40 - 120)	SW846 8270C
Pentachlorophenol	58	(20 - 130)	SW846 8270C
Phenol	63	(40 - 110)	SW846 8270C
Pyrene	114	(50 - 140)	SW846 8270C
1, 2, 4-Trichloro- benzene	74	(50 - 115)	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
2-Fluorobiphenyl	73	(40 - 130)
2-Fluorophenol	68	(50 - 115)
2, 4, 6-Tribromophenol	46	(30 - 115)
Nitrobenzene-d5	63	(45 - 115)
Phenol-d5	68	(50 - 120)
Terphenyl-d14	100	(50 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E1J030176 Work Order #...: ELNDF1AC Matrix.....: SOLID
LCS Lot-Sample#: E1J050000-360
Prep Date.....: 10/04/01 Analysis Date...: 10/04/01
Prep Batch #...: 1278360 Analysis Time...: 20:16
Dilution Factor: 1 Instrument ID...: G15
Analyst ID.....: 001464

PARAMETER	PERCENT	RECOVERY	METHOD
	<u>RECOVERY</u>	<u>LIMITS</u>	
TPH (as Gasoline)	86	(80 - 140)	SW846 8015B
SURROGATE	PERCENT	RECOVERY	
a,a,a-Trifluorotoluene (TFT)	98	<u>LIMITS</u> (60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1J030176 Work Order #....: ELRED1AC Matrix.....: SOLID
 LCS Lot-Sample#: E1J080000-436
 Prep Date.....: 10/04/01 Analysis Date..: 10/04/01
 Prep Batch #:....: 1281436 Analysis Time..: 17:56
 Dilution Factor: 1 Instrument ID..: MSD
 Analyst ID.....: 999998

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
1,1-Dichloroethene	87	(60 - 140)	SW846 8260B
Benzene	94	(60 - 130)	SW846 8260B
Trichloroethene	93	(60 - 140)	SW846 8260B
Toluene	91	(60 - 130)	SW846 8260B
Chlorobenzene	90	(60 - 130)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	98	(60 - 140)
1,2-Dichloroethane-d4	96	(60 - 140)
Toluene-d8	102	(60 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1J030176 Work Order #....: ELRE61AC Matrix.....: SOLID
 LCS Lot-Sample#: E1J080000-439
 Prep Date.....: 10/04/01 Analysis Date..: 10/04/01
 Prep Batch #:....: 1281439 Analysis Time..: 09:34
 Dilution Factor: 1 Instrument ID.: MSD
 Analyst ID.....: 999998

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
1,1-Dichloroethene	101	(60 - 150)	SW846 8260B
Benzene	108	(70 - 140)	SW846 8260B
Trichloroethene	112	(70 - 130)	SW846 8260B
Toluene	104	(70 - 130)	SW846 8260B
Chlorobenzene	98	(70 - 130)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	97	(70 - 130)
1,2-Dichloroethane-d4	80	(60 - 140)
Toluene-d8	90	(70 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #....: E1J030176 **Work Order #....:** EL1X71AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1J110000-523
Prep Date.....: 10/11/01 **Analysis Date..:** 10/15/01
Prep Batch #....: 1284523 **Analysis Time..:** 12:48
Dilution Factor: 1 **Instrument ID..:** MSI
Analyst ID.....: 010060

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Acenaphthene	95	(50 - 125)	SW846 8270C
4-Chloro-3-methylphenol	73	(50 - 110)	SW846 8270C
2-Chlorophenol	75	(50 - 120)	SW846 8270C
1,4-Dichlorobenzene	66	(40 - 115)	SW846 8270C
2,4-Dinitrotoluene	108	(40 - 120)	SW846 8270C
4-Nitrophenol	74	(10 - 120)	SW846 8270C
N-Nitrosodi-n-propyl-amine	66	(40 - 120)	SW846 8270C
Pentachlorophenol	72	(20 - 130)	SW846 8270C
Phenol	65	(40 - 110)	SW846 8270C
Pyrene	74	(50 - 140)	SW846 8270C
1,2,4-Trichloro-benzene	73	(50 - 115)	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorobiphenyl	87	(40 - 130)
2-Fluorophenol	74	(50 - 115)
2,4,6-Tribromophenol	90	(30 - 115)
Nitrobenzene-d5	72	(45 - 115)
Phenol-d5	70	(50 - 120)
Terphenyl-d14	76	(50 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>	
LCS Lot-Sample#:	ELJ040000-280 Prep Batch #...: 1277280					
Aluminum	90	(70 - 115)	SW846 6010B	10/04/01	ELJ1T1AV	
		Dilution Factor: 1				
		Analysis Time...: 20:26	Analyst ID.....: 021088		Instrument ID...: M01	
Arsenic	88	(75 - 115)	SW846 6010B	10/04/01	ELJ1T1AW	
		Dilution Factor: 1				
		Analysis Time...: 20:26	Analyst ID.....: 021088		Instrument ID...: M01	
Antimony	92	(75 - 115)	SW846 6010B	10/04-10/05/01	ELJ1T1AX	
		Dilution Factor: 1				
		Analysis Time...: 14:16	Analyst ID.....: 021088		Instrument ID...: M01	
Barium	101	(80 - 120)	SW846 6010B	10/04/01	ELJ1T1A0	
		Dilution Factor: 1				
		Analysis Time...: 20:26	Analyst ID.....: 021088		Instrument ID...: M01	
Cadmium	96	(80 - 120)	SW846 6010B	10/04/01	ELJ1T1A1	
		Dilution Factor: 1				
		Analysis Time...: 20:26	Analyst ID.....: 021088		Instrument ID...: M01	
Chromium	98	(85 - 120)	SW846 6010B	10/04/01	ELJ1T1A2	
		Dilution Factor: 1				
		Analysis Time...: 20:26	Analyst ID.....: 021088		Instrument ID...: M01	
Beryllium	96	(80 - 120)	SW846 6010B	10/04/01	ELJ1T1A3	
		Dilution Factor: 1				
		Analysis Time...: 20:26	Analyst ID.....: 021088		Instrument ID...: M01	
Lead	89	(80 - 120)	SW846 6010B	10/04/01	ELJ1T1A4	
		Dilution Factor: 1				
		Analysis Time...: 20:26	Analyst ID.....: 021088		Instrument ID...: M01	
Selenium	81	(70 - 115)	SW846 6010B	10/04/01	ELJ1T1A5	
		Dilution Factor: 1				
		Analysis Time...: 20:26	Analyst ID.....: 021088		Instrument ID...: M01	
Silver	89	(80 - 120)	SW846 6010B	10/04/01	ELJ1T1A6	
		Dilution Factor: 1				
		Analysis Time...: 20:26	Analyst ID.....: 021088		Instrument ID...: M01	

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Cobalt	94	(80 - 120)	SW846 6010B	10/04/01	ELJ1T1A7
		Dilution Factor: 1			
		Analysis Time...: 20:26	Analyst ID.....: 021088	Instrument ID...: M01	
Copper	96	(80 - 120)	SW846 6010B	10/04/01	ELJ1T1A8
		Dilution Factor: 1			
		Analysis Time...: 20:26	Analyst ID.....: 021088	Instrument ID...: M01	
Molybdenum	94	(80 - 120)	SW846 6010B	10/04/01	ELJ1T1A9
		Dilution Factor: 1			
		Analysis Time...: 20:26	Analyst ID.....: 021088	Instrument ID...: M01	
Nickel	98	(80 - 120)	SW846 6010B	10/04/01	ELJ1T1CA
		Dilution Factor: 1			
		Analysis Time...: 20:26	Analyst ID.....: 021088	Instrument ID...: M01	
Thallium	87	(75 - 125)	SW846 6010B	10/04/01	ELJ1T1CC
		Dilution Factor: 1			
		Analysis Time...: 20:26	Analyst ID.....: 021088	Instrument ID...: M01	
Vanadium	96	(80 - 120)	SW846 6010B	10/04/01	ELJ1T1CD
		Dilution Factor: 1			
		Analysis Time...: 20:26	Analyst ID.....: 021088	Instrument ID...: M01	
Zinc	93	(80 - 120)	SW846 6010B	10/04/01	ELJ1T1CE
		Dilution Factor: 1			
		Analysis Time...: 20:26	Analyst ID.....: 021088	Instrument ID...: M01	
LCS Lot-Sample#:	E1J050000-213	Prep Batch #...:	1278213		
Aluminum	90	(70 - 115)	SW846 6010B	10/05/01	ELL8D1AX
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Arsenic	96	(75 - 115)	SW846 6010B	10/05/01	ELL8D1A0
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Antimony	91	(75 - 115)	SW846 6010B	10/05/01	ELL8D1A1
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Barium	99	(80 - 120)	SW846 6010B	10/05/01	ELL8D1A2
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1J030176				Matrix.....: SOLID	
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Cadmium	101	(80 - 120)	SW846 6010B	10/05/01	ELL8D1A3
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Chromium	107	(85 - 120)	SW846 6010B	10/05/01	ELL8D1A4
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Beryllium	104	(80 - 120)	SW846 6010B	10/05/01	ELL8D1A5
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Lead	95	(80 - 120)	SW846 6010B	10/05/01	ELL8D1A6
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Selenium	90	(70 - 115)	SW846 6010B	10/05/01	ELL8D1A7
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Silver	98	(80 - 120)	SW846 6010B	10/05/01	ELL8D1A8
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Cobalt	102	(80 - 120)	SW846 6010B	10/05/01	ELL8D1A9
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Copper	96	(80 - 120)	SW846 6010B	10/05/01	ELL8D1CA
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Molybdenum	98	(80 - 120)	SW846 6010B	10/05/01	ELL8D1CC
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Nickel	104	(80 - 120)	SW846 6010B	10/05/01	ELL8D1CD
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Thallium	92	(75 - 125)	SW846 6010B	10/05/01	ELL8D1CE
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1J030176

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Vanadium	103	(80 - 120)	SW846 6010B	10/05/01	ELL8D1AV
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
Zinc	102	(80 - 120)	SW846 6010B	10/05/01	ELL8D1AW
		Dilution Factor: 1			
		Analysis Time...: 21:49	Analyst ID.....: 021088	Instrument ID...: M01	
LCS Lot-Sample#:	E1J050000-216	Prep Batch #...:	1278216		
Mercury	101	(85 - 115)	SW846 7471A	10/05/01	ELL8H1AC
		Dilution Factor: 1			
		Analysis Time...: 13:57	Analyst ID.....: 000023	Instrument ID...: M04	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J030176 Matrix.....: SOLID
 Date Sampled...: 10/02/01 19:00 Date Received..: 10/02/01 21:30

PARAMETER	SAMPLE SPIKE MEASURED			PERCNT			PREPARATION-	WORK
	AMOUNT	AMT	UNITS	RECVRY	RPD	METHOD		
MS Lot-Sample #: E1J030176-001 Prep Batch #: 1277280								
Aluminum	5950	200	7340 NC	mg/kg		SW846 6010B	10/04/01	ELG2J1A3
	5950	200	7270 NC	mg/kg		SW846 6010B	10/04/01	ELG2J1A4
			Dilution Factor: 1					
			Analysis Time...: 20:51			Instrument ID...: M01		Analyst ID.....: 021088
			MS Run #.....: 1277128					
Arsenic	4.5	200	179	mg/kg	87	SW846 6010B	10/04/01	ELG2J1A5
	4.5	200	179	mg/kg	87	0.28 SW846 6010B	10/04/01	ELG2J1A6
			Dilution Factor: 1					
			Analysis Time...: 20:51			Instrument ID...: M01		Analyst ID.....: 021088
			MS Run #.....: 1277128					
Antimony	ND	50.0	11.9 N	mg/kg	24	SW846 6010B	10/04-10/05/01	ELG2J1A7
	ND	50.0	11.9 N	mg/kg	24	0.26 SW846 6010B	10/04-10/05/01	ELG2J1A8
			Dilution Factor: 1					
			Analysis Time...: 14:50			Instrument ID...: M01		Analyst ID.....: 021088
			MS Run #.....: 1277128					
Barium	44.8	200	251	mg/kg	103	SW846 6010B	10/04/01	ELG2J1A9
	44.8	200	251	mg/kg	103	0.07 SW846 6010B	10/04/01	ELG2J1CA
			Dilution Factor: 1					
			Analysis Time...: 20:51			Instrument ID...: M01		Analyst ID.....: 021088
			MS Run #.....: 1277128					
Cadmium	ND	5.00	4.38	mg/kg	88	SW846 6010B	10/04/01	ELG2J1CC
	ND	5.00	4.34	mg/kg	87	0.98 SW846 6010B	10/04/01	ELG2J1CD
			Dilution Factor: 1					
			Analysis Time...: 20:51			Instrument ID...: M01		Analyst ID.....: 021088
			MS Run #.....: 1277128					
Chromium	10.7	20.0	31.3	mg/kg	103	SW846 6010B	10/04/01	ELG2J1CE
	10.7	20.0	30.9	mg/kg	101	1.3 SW846 6010B	10/04/01	ELG2J1CF
			Dilution Factor: 1					
			Analysis Time...: 20:51			Instrument ID...: M01		Analyst ID.....: 021088
			MS Run #.....: 1277128					

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J030176

Matrix.....: SOLID

Date Sampled...: 10/02/01 19:00 Date Received..: 10/02/01 21:30

PARAMETER	SAMPLE	SPIKE	MEASURED	UNITS	PERCNT		METHOD	PREPARATION-	WORK
	AMOUNT	AMT	AMOUNT		RECVRY	RFD		ANALYSIS DATE	ORDER #
Beryllium									
	0.18	5.00	5.02	mg/kg	97		SW846 6010B	10/04/01	ELG2J1CG
	0.18	5.00	5.00	mg/kg	96	0.29	SW846 6010B	10/04/01	ELG2J1CH
	Dilution Factor: 1								
	Analysis Time...: 20:51 Instrument ID...: M01								
	MS Run #.....: 1277128								
Lead									
	2.2	50.0	47.0	mg/kg	90		SW846 6010B	10/04/01	ELG2J1CJ
	2.2	50.0	47.0	mg/kg	90	0.06	SW846 6010B	10/04/01	ELG2J1CK
	Dilution Factor: 1								
	Analysis Time...: 20:51 Instrument ID...: M01								
	MS Run #.....: 1277128								
Selenium									
	ND	200	161	mg/kg	80		SW846 6010B	10/04/01	ELG2J1CL
	ND	200	161	mg/kg	80	0.15	SW846 6010B	10/04/01	ELG2J1CM
	Dilution Factor: 1								
	Analysis Time...: 20:51 Instrument ID...: M01								
	MS Run #.....: 1277128								
Silver									
	ND	5.00	4.27	mg/kg	85		SW846 6010B	10/04/01	ELG2J1CN
	ND	5.00	4.20	mg/kg	84	1.6	SW846 6010B	10/04/01	ELG2J1CP
	Dilution Factor: 1								
	Analysis Time...: 20:51 Instrument ID...: M01								
	MS Run #.....: 1277128								
Cobalt									
	3.9	50.0	50.9	mg/kg	94		SW846 6010B	10/04/01	ELG2J1CQ
	3.9	50.0	50.5	mg/kg	93	0.92	SW846 6010B	10/04/01	ELG2J1CR
	Dilution Factor: 1								
	Analysis Time...: 20:51 Instrument ID...: M01								
	MS Run #.....: 1277128								
Copper									
	5.8	25.0	32.6	mg/kg	107		SW846 6010B	10/04/01	ELG2J1CT
	5.8	25.0	32.3	mg/kg	106	0.69	SW846 6010B	10/04/01	ELG2J1CU
	Dilution Factor: 1								
	Analysis Time...: 20:51 Instrument ID...: M01								
	MS Run #.....: 1277128								

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J030176 **Matrix.....:** SOLID
Date Sampled....: 10/02/01 19:00 **Date Received..:** 10/02/01 21:30

PARAMETER	SAMPLE SPIKE MEASURED			PERCNT			PREPARATION- ANALYSIS DATE	WORK ORDER #
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD	
Molybdenum								
	0.60	100	91.0	mg/kg	90		SW846 6010B	10/04/01 ELG2J1CW
	0.60	100	90.4	mg/kg	90	0.67	SW846 6010B	10/04/01 ELG2J1CW
	Dilution Factor: 1							
	Analysis Time...: 20:51 Instrument ID...: M01							
	MS Run #.....: 1277128							
Nickel								
	7.3	50.0	56.5	mg/kg	98		SW846 6010B	10/04/01 ELG2J1CX
	7.3	50.0	56.3	mg/kg	98	0.34	SW846 6010B	10/04/01 ELG2J1CO
	Dilution Factor: 1							
	Analysis Time...: 20:51 Instrument ID...: M01							
	MS Run #.....: 1277128							
Thallium								
	ND	200	182	mg/kg	91		SW846 6010B	10/04/01 ELG2J1C1
	ND	200	179	mg/kg	90	1.2	SW846 6010B	10/04/01 ELG2J1C2
	Dilution Factor: 1							
	Analysis Time...: 20:51 Instrument ID...: M01							
	MS Run #.....: 1277128							
Vanadium								
	19.3	50.0	69.3	mg/kg	100		SW846 6010B	10/04/01 ELG2J1C3
	19.3	50.0	68.7	mg/kg	99	0.86	SW846 6010B	10/04/01 ELG2J1C4
	Dilution Factor: 1							
	Analysis Time...: 20:51 Instrument ID...: M01							
	MS Run #.....: 1277128							
Zinc								
	20.5	50.0	69.2	mg/kg	97		SW846 6010B	10/04/01 ELG2J1C5
	20.5	50.0	69.0	mg/kg	97	0.35	SW846 6010B	10/04/01 ELG2J1C6
	Dilution Factor: 1							
	Analysis Time...: 20:51 Instrument ID...: M01							
	MS Run #.....: 1277128							

MS Lot-Sample #: E1J030176-001 **Prep Batch #....:** 1278216

Mercury

ND	0.167	0.182	mg/kg	109		SW846 7471A	10/05/01	ELG2J1C9
ND	0.167	0.182	mg/kg	109	0.0	SW846 7471A	10/05/01	ELG2J1DA
Dilution Factor: 1								
Analysis Time...: 14:00 Instrument ID...: M04								
MS Run #.....: 1278099								

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: E1J030176 Work Order #...: ELG2J1C7-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J030176-001 ELG2J1C8-MSD
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1277294
 Prep Date.....: 10/04/01 Analysis Date...: 10/11/01
 Prep Batch #...: 1277539 Analysis Time...: 01:23
 Dilution Factor: 1 Analyst ID....: 010060 Instrument ID..: MSI

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		METHOD
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD	
Acenaphthene	ND	3330	2800	ug/kg	84		SW846 8270C
	ND	3330	2920	ug/kg	88	4.5	SW846 8270C
4-Chloro-3-methylphenol	ND	5000	3520	ug/kg	70		SW846 8270C
	ND	5000	3650	ug/kg	73	3.7	SW846 8270C
2-Chlorophenol	ND	5000	3620	ug/kg	72		SW846 8270C
	ND	5000	3790	ug/kg	76	4.6	SW846 8270C
1,4-Dichlorobenzene	ND	3330	2020	ug/kg	61		SW846 8270C
	ND	3330	2210	ug/kg	66	8.8	SW846 8270C
2,4-Dinitrotoluene	ND	3330	3080	ug/kg	93		SW846 8270C
	ND	3330	3120	ug/kg	94	1.1	SW846 8270C
4-Nitrophenol	ND	5000	3560	ug/kg	71		SW846 8270C
	ND	5000	3760	ug/kg	75	5.4	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	3330	2220	ug/kg	67		SW846 8270C
	ND	3330	2400	ug/kg	72	7.9	SW846 8270C
Pentachlorophenol	ND	5000	2550	ug/kg	51		SW846 8270C
	ND	5000	2760	ug/kg	55	7.8	SW846 8270C
Phenol	ND	5000	3070	ug/kg	61		SW846 8270C
	ND	5000	3220	ug/kg	64	4.7	SW846 8270C
Pyrene	ND	3330	3510	ug/kg	105		SW846 8270C
	ND	3330	3390	ug/kg	102	3.6	SW846 8270C
1,2,4-Trichlorobenzene	ND	3330	2260	ug/kg	68		SW846 8270C
	ND	3330	2400	ug/kg	72	5.7	SW846 8270C

SURROGATE	PERCENT		RECOVERY LIMITS
	RECOVERY		
2-Fluorobiphenyl	67		(40 - 130)
	63		(40 - 130)
2-Fluorophenol	65		(50 - 115)
	63		(50 - 115)
2,4,6-Tribromophenol	48		(30 - 115)
	46		(30 - 115)
Nitrobenzene-d5	60		(45 - 115)
	57		(45 - 115)
Phenol-d5	66		(50 - 120)
	66		(50 - 120)

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: E1J030176 Work Order #...: ELG2J1C7-MS Matrix.....: SOLID
MS Lot-Sample #: E1J030176-001 ELG2J1C8-MSD

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Terphenyl-d14	90	(50 - 140)
	87	(50 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: E1J030176 Work Order #....: ELG2J1DC-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J030176-001 ELG2J1DD-MSD
 Date Sampled....: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1278202
 Prep Date.....: 10/04/01 Analysis Date...: 10/05/01
 Prep Batch #....: 1278360 Analysis Time...: 03:21
 Dilution Factor: 1 Analyst ID.....: 001464 Instrument ID...: G15

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		METHOD
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD	
TPH (as Gasoline)	ND	5.00	4.30	mg/kg	86		SW846 8015B
	ND	5.00	4.89	mg/kg	98	13	SW846 8015B

SURROGATE	PERCENT		RECOVERY
	RECOVERY	LIMITS	
a,a,a-Trifluorotoluene (TFT)	93	(60 - 130)	
	99	(60 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E1J030176 Work Order #...: ELG2J1DL-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J030176-001 ELG2J1DM-MSD
 Date Sampled...: 10/02/01 19:00 Date Received..: 10/02/01 21:30 MS Run #.....: 1281228
 Prep Date.....: 10/04/01 Analysis Date..: 10/04/01
 Prep Batch #...: 1281439 Analysis Time...: 15:47
 Dilution Factor: 1 Analyst ID....: 999998 Instrument ID.: MSD

<u>PARAMETER</u>	SAMPLE	SPIKE	MEASRD	PERCENT		
	AMOUNT	AMT	AMOUNT	RECOVERY	RPD	METHOD
1,1-Dichloroethene	ND	50.0	51.5	ug/kg	103	SW846 8260B
	ND	50.0	49.4	ug/kg	99	SW846 8260B
Benzene	ND	50.0	53.8	ug/kg	108	SW846 8260B
	ND	50.0	51.8	ug/kg	104	SW846 8260B
Trichloroethene	ND	50.0	58.1	ug/kg	116	SW846 8260B
	ND	50.0	57.9	ug/kg	116	SW846 8260B
Toluene	ND	50.0	48.3	ug/kg	97	SW846 8260B
	ND	50.0	46.4	ug/kg	93	SW846 8260B
Chlorobenzene	ND	50.0	45.9	ug/kg	92	SW846 8260B
	ND	50.0	45.0	ug/kg	90	SW846 8260B

<u>SURROGATE</u>	PERCENT		RECOVERY
	RECOVERY	LIMITS	
Bromofluorobenzene	94	(70 - 130)	
	94	(70 - 130)	
1,2-Dichloroethane-d4	79	(60 - 140)	
	78	(60 - 140)	
Toluene-d8	89	(70 - 130)	
	89	(70 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J030176 Matrix.....: SOLID
 Date Sampled....: 10/02/01 19:00 Date Received..: 10/02/01 21:30

PARAMETER	SAMPLE SPIKE MEASURED			PERCNT			PREPARATION-	WORK		
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD				
MS Lot-Sample #: E1J030176-002 Prep Batch #...: 1278213										
Aluminum										
	7420	200	7630	NC	mg/kg		SW846 6010B	10/05/01 ELG2Q1A9		
	7420	200	7700	NC	mg/kg		SW846 6010B	10/05/01 ELG2Q1CA		
				Dilution Factor:	1					
				Analysis Time...:	22:28	Instrument ID...: M01		Analyst ID.....: 021088		
				MS Run #.....:	1278098					
Arsenic										
	4.2	200	194	mg/kg	95		SW846 6010B	10/05/01 ELG2Q1CC		
	4.2	200	191	mg/kg	93	1.4	SW846 6010B	10/05/01 ELG2Q1CD		
				Dilution Factor:	1					
				Analysis Time...:	22:28	Instrument ID...: M01		Analyst ID.....: 021088		
				MS Run #.....:	1278098					
Antimony										
	ND	50.0	19.0	N	mg/kg	38	SW846 6010B	10/05/01 ELG2Q1CE		
	ND	50.0	18.7	N	mg/kg	37	1.8 SW846 6010B	10/05/01 ELG2Q1CF		
				Dilution Factor:	1					
				Analysis Time...:	22:28	Instrument ID...: M01		Analyst ID.....: 021088		
				MS Run #.....:	1278098					
Barium										
	37.9	200	226	mg/kg	94		SW846 6010B	10/05/01 ELG2Q1CG		
	37.9	200	224	mg/kg	93	0.48	SW846 6010B	10/05/01 ELG2Q1CH		
				Dilution Factor:	1					
				Analysis Time...:	22:28	Instrument ID...: M01		Analyst ID.....: 021088		
				MS Run #.....:	1278098					
Cadmium										
	ND	5.00	4.46	mg/kg	89		SW846 6010B	10/05/01 ELG2Q1CJ		
	ND	5.00	4.42	mg/kg	88	0.83	SW846 6010B	10/05/01 ELG2Q1CK		
				Dilution Factor:	1					
				Analysis Time...:	22:28	Instrument ID...: M01		Analyst ID.....: 021088		
				MS Run #.....:	1278098					
Chromium										
	13.6	20.0	34.0	mg/kg	102		SW846 6010B	10/05/01 ELG2Q1CL		
	13.6	20.0	33.2	mg/kg	98	2.2	SW846 6010B	10/05/01 ELG2Q1CM		
				Dilution Factor:	1					
				Analysis Time...:	22:28	Instrument ID...: M01		Analyst ID.....: 021088		
				MS Run #.....:	1278098					

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1J030176

Matrix.....: SOLID

Date Sampled...: 10/02/01 19:00 Date Received..: 10/02/01 21:30

PARAMETER	SAMPLE	SPIKE	MEASURED	UNITS	PERCNT		METHOD	PREPARATION-	WORK
	AMOUNT	AMT	RECVRY		RPD	ANALYSIS DATE		ORDER #	
Beryllium									
	0.25	5.00	5.31	mg/kg	101		SW846 6010B	10/05/01	ELG2Q1CN
	0.25	5.00	5.25	mg/kg	100	1.1	SW846 6010B	10/05/01	ELG2Q1CP
	Dilution Factor: 1								
	Analysis Time...: 22:28 Instrument ID...: M01								
	MS Run #.....: 1278098								
Lead									
	2.1	50.0	49.2	mg/kg	94		SW846 6010B	10/05/01	ELG2Q1CQ
	2.1	50.0	48.6	mg/kg	93	1.2	SW846 6010B	10/05/01	ELG2Q1CR
	Dilution Factor: 1								
	Analysis Time...: 22:28 Instrument ID...: M01								
	MS Run #.....: 1278098								
Selenium									
	0.56	200	179	mg/kg	89		SW846 6010B	10/05/01	ELG2Q1CT
	0.56	200	178	mg/kg	89	0.72	SW846 6010B	10/05/01	ELG2Q1CU
	Dilution Factor: 1								
	Analysis Time...: 22:28 Instrument ID...: M01								
	MS Run #.....: 1278098								
Silver									
	ND	5.00	4.65	mg/kg	93		SW846 6010B	10/05/01	ELG2Q1CV
	ND	5.00	4.59	mg/kg	92	1.4	SW846 6010B	10/05/01	ELG2Q1CW
	Dilution Factor: 1								
	Analysis Time...: 22:28 Instrument ID...: M01								
	MS Run #.....: 1278098								
Cobalt									
	4.5	50.0	53.6	mg/kg	98		SW846 6010B	10/05/01	ELG2Q1CX
	4.5	50.0	53.0	mg/kg	97	1.1	SW846 6010B	10/05/01	ELG2Q1CQ
	Dilution Factor: 1								
	Analysis Time...: 22:28 Instrument ID...: M01								
	MS Run #.....: 1278098								
Copper									
	6.3	25.0	29.8	mg/kg	94		SW846 6010B	10/05/01	ELG2Q1C1
	6.3	25.0	29.8	mg/kg	94	0.04	SW846 6010B	10/05/01	ELG2Q1C2
	Dilution Factor: 1								
	Analysis Time...: 22:28 Instrument ID...: M01								
	MS Run #.....: 1278098								

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J030176 Matrix.....: SOLID
 Date Sampled...: 10/02/01 19:00 Date Received..: 10/02/01 21:30

PARAMETER	SAMPLE SPIKE MEASURED			PERCNT			PREPARATION+	WORK	
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD			
Molybdenum									
ND	100	95.4		mg/kg	95		SW846 6010B	10/05/01	ELG2Q1C3
ND	100	93.8		mg/kg	94	1.7	SW846 6010B	10/05/01	ELG2Q1C4
			Dilution Factor:	1					
			Analysis Time...:	22:28			Instrument ID...: M01		Analyst ID.....: 021088
			MS Run #.....:	1278098					
Nickel									
8.8	50.0	58.4		mg/kg	99		SW846 6010B	10/05/01	ELG2Q1C5
8.8	50.0	57.6		mg/kg	97	1.4	SW846 6010B	10/05/01	ELG2Q1C6
			Dilution Factor:	1					
			Analysis Time...:	22:28			Instrument ID...: M01		Analyst ID.....: 021088
			MS Run #.....:	1278098					
Thallium									
ND	200	188		mg/kg	94		SW846 6010B	10/05/01	ELG2Q1C7
ND	200	186		mg/kg	93	0.90	SW846 6010B	10/05/01	ELG2Q1C8
			Dilution Factor:	1					
			Analysis Time...:	22:28			Instrument ID...: M01		Analyst ID.....: 021088
			MS Run #.....:	1278098					
Vanadium									
23.5	50.0	73.3		mg/kg	100		SW846 6010B	10/05/01	ELG2Q1A5
23.5	50.0	72.5		mg/kg	98	1.2	SW846 6010B	10/05/01	ELG2Q1A6
			Dilution Factor:	1					
			Analysis Time...:	22:28			Instrument ID...: M01		Analyst ID.....: 021088
			MS Run #.....:	1278098					
Zinc									
27.7	50.0	76.5		mg/kg	98		SW846 6010B	10/05/01	ELG2Q1A7
27.7	50.0	76.5		mg/kg	98	0.06	SW846 6010B	10/05/01	ELG2Q1A8
			Dilution Factor:	1					
			Analysis Time...:	22:28			Instrument ID...: M01		Analyst ID.....: 021088
			MS Run #.....:	1278098					

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1J030176 Work Order #....: ELG2Q1A3-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J030176-002 ELG2Q1A4-MSD
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1277146
 Prep Date.....: 10/04/01 Analysis Date...: 10/05/01
 Prep Batch #....: 1277315 Analysis Time...: 05:23
 Dilution Factor: 1 Analyst ID....: 356074 Instrument ID...: G02

<u>PARAMETER</u>	<u>SAMPLE</u>	<u>SPIKE</u>	<u>MEASRD</u>	<u>PERCENT</u>			<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>	<u>RPD</u>	
TPH (as Diesel)	ND	250	228	mg/kg	91		SW846 8015B
	ND	250	233	mg/kg	93	2.1	SW846 8015B
<u>SURROGATE</u>				<u>PERCENT</u>	<u>RECOVERY</u>		
Benzo(a)pyrene				<u>RECOVERY</u>	<u>LIMITS</u>		
				81	(60 - 130)		
				83	(60 - 130)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E1J030176 Work Order #....: ELG2R1A3-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J030176-003 ELG2R1A4-MSD
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1281224
 Prep Date.....: 10/04/01 Analysis Date...: 10/04/01
 Prep Batch #....: 1281436 Analysis Time...: 20:33
 Dilution Factor: 8 Analyst ID....: 999998 Instrument ID...: MSD

<u>PARAMETER</u>	<u>SAMPLE</u>	<u>SPIKE</u>	<u>MEASRD</u>	<u>UNITS</u>	<u>PERCENT</u>	<u>RPD</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMT*</u>	<u>AMOUNT</u>		<u>RECOVERY</u>		
1,1-Dichloroethene	ND	2500	2460	ug/kg	98		SW846 8260B
	ND	2500	2620	ug/kg	105	6.1	SW846 8260B
Benzene	ND	2500	2430	ug/kg	97		SW846 8260B
	ND	2500	2480	ug/kg	99	1.8	SW846 8260B
Trichloroethene	ND	2500	2410	ug/kg	96		SW846 8260B
	ND	2500	2440	ug/kg	98	1.3	SW846 8260B
Toluene	17000	2500		ug/kg	0.0		SW846 8260B
			Qualifiers: NC,MSB				
	17000	2500		ug/kg	0.0	0.0	SW846 8260B
			Qualifiers: NC,MSB				
Chlorobenzene	ND	2500	2360	ug/kg	94		SW846 8260B
	ND	2500	2370	ug/kg	95	0.50	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
	<u>RECOVERY</u>		
Bromofluorobenzene	108		(60 - 140)
	106		(60 - 140)
1,2-Dichloroethane-d4	101		(60 - 140)
	94		(60 - 140)
Toluene-d8	104		(60 - 140)
	111		(60 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: E1J030176 Work Order #...: ELG2T1A3-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J030176-004 ELG2T1A4-MSD
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1284264
 Prep Date.....: 10/11/01 Analysis Date...: 10/15/01
 Prep Batch #...: 1284523 Analysis Time...: 13:52
 Dilution Factor: 1 Analyst ID....: 010060 Instrument ID.: MSI

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD	METHOD
Acenaphthene	ND	3330	2740	ug/kg	82		SW846 8270C
	ND	3330	2830	ug/kg	85	3.2	SW846 8270C
4-Chloro-3-methylphenol	ND	5000	3290	ug/kg	66		SW846 8270C
	ND	5000	3490	ug/kg	70	5.9	SW846 8270C
2-Chlorophenol	ND	5000	3720	ug/kg	74		SW846 8270C
	ND	5000	3420	ug/kg	68	8.4	SW846 8270C
1,4-Dichlorobenzene	ND	3330	1800	ug/kg	54		SW846 8270C
	ND	3330	1830	ug/kg	55	2.1	SW846 8270C
2,4-Dinitrotoluene	ND	3330	3130	ug/kg	94		SW846 8270C
	ND	3330	3150	ug/kg	95	0.82	SW846 8270C
4-Nitrophenol	ND	5000	3750	ug/kg	75		SW846 8270C
	ND	5000	4170	ug/kg	83	10	SW846 8270C
N-Nitrosodi-n-propyl- amine	ND	3330	2060	ug/kg	62		SW846 8270C
	ND	3330	2300	ug/kg	69	11	SW846 8270C
Pentachlorophenol	ND	5000	3100	ug/kg	62		SW846 8270C
	ND	5000	3100	ug/kg	62	0.09	SW846 8270C
Phenol	ND	5000	3440	ug/kg	69		SW846 8270C
	ND	5000	3220	ug/kg	64	6.6	SW846 8270C
Pyrene	ND	3330	2450	ug/kg	73		SW846 8270C
	ND	3330	2120	ug/kg	64	14	SW846 8270C
1,2,4-Trichloro- benzene	ND	3330	1940	ug/kg	58		SW846 8270C
	ND	3330	1910	ug/kg	57	1.5	SW846 8270C

SURROGATE	PERCENT		RECOVERY LIMITS
	RECOVERY		
2-Fluorobiphenyl	58		(40 - 130)
	59		(40 - 130)
2-Fluorophenol	70		(50 - 115)
	65		(50 - 115)
2,4,6-Tribromophenol	76		(30 - 115)
	77		(30 - 115)
Nitrobenzene-d5	60		(45 - 115)
	63		(45 - 115)
Phenol-d5	69		(50 - 120)
	63		(50 - 120)

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: E1J030176 Work Order #...: ELG2T1A3-MS Matrix.....: SOLID
MS Lot-Sample #: E1J030176-004 ELG2T1A4-MSD

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Terphenyl-d14	65	(50 - 140)
	59	(50 - 140)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1J030176 Date Sampled...: 10/02/01 19:00 Date Received.: 10/02/01 21:30					Matrix.....: SOLID
PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: E1J030176-001 Prep Batch #...: 1277280					
Aluminum	NC	(70 - 115)	SW846 6010B	10/04/01	ELG2J1A3
	NC	(70 - 115) (0-25)	SW846 6010B	10/04/01	ELG2J1A4
		Dilution Factor: 1			
		Analysis Time...: 20:51	Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1277128			
Arsenic	87	(75 - 115)	SW846 6010B	10/04/01	ELG2J1A5
	87	(75 - 115) 0.28 (0-25)	SW846 6010B	10/04/01	ELG2J1A6
		Dilution Factor: 1			
		Analysis Time...: 20:51	Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1277128			
Antimony	24 N	(75 - 115)	SW846 6010B	10/04-10/05/01	ELG2J1A7
	24 N	(75 - 115) 0.26 (0-25)	SW846 6010B	10/04-10/05/01	ELG2J1A8
		Dilution Factor: 1			
		Analysis Time...: 14:50	Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1277128			
Barium	103	(80 - 120)	SW846 6010B	10/04/01	ELG2J1A9
	103	(80 - 120) 0.07 (0-25)	SW846 6010B	10/04/01	ELG2J1CA
		Dilution Factor: 1			
		Analysis Time...: 20:51	Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1277128			
Cadmium	88	(80 - 120)	SW846 6010B	10/04/01	ELG2J1CC
	87	(80 - 120) 0.98 (0-25)	SW846 6010B	10/04/01	ELG2J1CD
		Dilution Factor: 1			
		Analysis Time...: 20:51	Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1277128			
Chromium	103	(85 - 120)	SW846 6010B	10/04/01	ELG2J1CE
	101	(85 - 120) 1.3 (0-25)	SW846 6010B	10/04/01	ELG2J1CF
		Dilution Factor: 1			
		Analysis Time...: 20:51	Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1277128			
Beryllium	97	(80 - 120)	SW846 6010B	10/04/01	ELG2J1CG
	96	(80 - 120) 0.29 (0-25)	SW846 6010B	10/04/01	ELG2J1CH
		Dilution Factor: 1			
		Analysis Time...: 20:51	Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1277128			

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MATRIX SPICKE SAMPLE EVALUATION REPORT

TOTAL Metals

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-		WORK ORDER #
						ANALYSIS DATE		
Lead	90	(80 - 120)			SW846 6010B	10/04/01		ELG2J1CJ
	90	(80 - 120) 0.06 (0-25)			SW846 6010B	10/04/01		ELG2J1CK
		Dilution Factor: 1						
		Analysis Time...: 20:51			Instrument ID...: M01		Analyst ID....: 021088	
		MS Run #.....: 1277128						
Selenium	80	(70 - 115)			SW846 6010B	10/04/01		ELG2J1CL
	80	(70 - 115) 0.15 (0-25)			SW846 6010B	10/04/01		ELG2J1CM
		Dilution Factor: 1						
		Analysis Time...: 20:51			Instrument ID...: M01		Analyst ID....: 021088	
		MS Run #.....: 1277128						
Silver	85	(80 - 120)			SW846 6010B	10/04/01		ELG2J1CN
	84	(80 - 120) 1.6 (0-25)			SW846 6010B	10/04/01		ELG2J1CP
		Dilution Factor: 1						
		Analysis Time...: 20:51			Instrument ID...: M01		Analyst ID....: 021088	
		MS Run #.....: 1277128						
Cobalt	94	(80 - 120)			SW846 6010B	10/04/01		ELG2J1CQ
	93	(80 - 120) 0.92 (0-25)			SW846 6010B	10/04/01		ELG2J1CR
		Dilution Factor: 1						
		Analysis Time...: 20:51			Instrument ID...: M01		Analyst ID....: 021088	
		MS Run #.....: 1277128						
Copper	107	(80 - 120)			SW846 6010B	10/04/01		ELG2J1CT
	106	(80 - 120) 0.69 (0-25)			SW846 6010B	10/04/01		ELG2J1CU
		Dilution Factor: 1						
		Analysis Time...: 20:51			Instrument ID...: M01		Analyst ID....: 021088	
		MS Run #.....: 1277128						
Molybdenum	90	(80 - 120)			SW846 6010B	10/04/01		ELG2J1CV
	90	(80 - 120) 0.67 (0-25)			SW846 6010B	10/04/01		ELG2J1CW
		Dilution Factor: 1						
		Analysis Time...: 20:51			Instrument ID...: M01		Analyst ID....: 021088	
		MS Run #.....: 1277128						
Nickel	98	(80 - 120)			SW846 6010B	10/04/01		ELG2J1CX
	98	(80 - 120) 0.34 (0-25)			SW846 6010B	10/04/01		ELG2J1CO
		Dilution Factor: 1						
		Analysis Time...: 20:51			Instrument ID...: M01		Analyst ID....: 021088	
		MS Run #.....: 1277128						

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: ELJ030176 Matrix.....: SOLID
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #
Thallium	91	(75 - 125)		SW846 6010B	10/04/01	ELG2J1C1
	90	(75 - 125)	1.2 (0-25)	SW846 6010B	10/04/01	ELG2J1C2
		Dilution Factor: 1				
		Analysis Time...: 20:51		Instrument ID...: M01		Analyst ID....: 021088
Vanadium	100	(80 - 120)		SW846 6010B	10/04/01	ELG2J1C3
	99	(80 - 120)	0.86 (0-25)	SW846 6010B	10/04/01	ELG2J1C4
		Dilution Factor: 1				
		Analysis Time...: 20:51		Instrument ID...: M01		Analyst ID....: 021088
Zinc	97	(80 - 120)		SW846 6010B	10/04/01	ELG2J1C5
	97	(80 - 120)	0.35 (0-25)	SW846 6010B	10/04/01	ELG2J1C6
		Dilution Factor: 1				
		Analysis Time...: 20:51		Instrument ID...: M01		Analyst ID....: 021088
MS Lot-Sample #: ELJ030176-001 Prep Batch #...: 1278216		MS Run #....: 1277128				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #....: E1J030176 Work Order #....: ELG2J1C7-MS Matrix.....: SOLID
MS Lot-Sample #: E1J030176-001 ELG2J1C8-MSD
Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1277294
Prep Date.....: 10/04/01 Analysis Date...: 10/11/01
Prep Batch #....: 1277539 Analysis Time...: 01:23
Dilution Factor: 1 Analyst ID....: 010060 Instrument ID..: MSI

PARAMETER	PERCENT	RECOVERY	RPD	RPD	METHOD
	RECOVERY	LIMITS		LIMITS	
Acenaphthene	84	(50 - 125)			SW846 8270C
	88	(50 - 125)	4.5	(0-35)	SW846 8270C
4-Chloro-3-methylphenol	70	(50 - 110)			SW846 8270C
	73	(50 - 110)	3.7	(0-35)	SW846 8270C
2-Chlorophenol	72	(50 - 120)			SW846 8270C
	76	(50 - 120)	4.6	(0-35)	SW846 8270C
1,4-Dichlorobenzene	61	(40 - 115)			SW846 8270C
	66	(40 - 115)	8.8	(0-35)	SW846 8270C
2,4-Dinitrotoluene	93	(40 - 120)			SW846 8270C
	94	(40 - 120)	1.1	(0-35)	SW846 8270C
4-Nitrophenol	71	(10 - 120)			SW846 8270C
	75	(10 - 120)	5.4	(0-35)	SW846 8270C
N-Nitrosodi-n-propyl-amine	67	(40 - 120)			SW846 8270C
	72	(40 - 120)	7.9	(0-35)	SW846 8270C
Pentachlorophenol	51	(20 - 130)			SW846 8270C
	55	(20 - 130)	7.8	(0-35)	SW846 8270C
Phenol	61	(40 - 110)			SW846 8270C
	64	(40 - 110)	4.7	(0-35)	SW846 8270C
Pyrene	105	(50 - 140)			SW846 8270C
	102	(50 - 140)	3.6	(0-35)	SW846 8270C
1,2,4-Trichlorobenzene	68	(50 - 115)			SW846 8270C
	72	(50 - 115)	5.7	(0-35)	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorobiphenyl	67	(40 - 130)
	63	(40 - 130)
2-Fluorophenol	65	(50 - 115)
	63	(50 - 115)
2,4,6-Tribromophenol	48	(30 - 115)
	46	(30 - 115)
Nitrobenzene-d5	60	(45 - 115)
	57	(45 - 115)
Phenol-d5	66	(50 - 120)
	66	(50 - 120)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: E1J030176 Work Order #...: ELG2J1C7-MS Matrix.....: SOLID
MS Lot-Sample #: E1J030176-001 ELG2J1C8-MSD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Terphenyl-d14	90	(50 - 140)
	87	(50 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: E1J030176 Work Order #....: ELG2J1DC-MS Matrix.....: SOLID
MS Lot-Sample #: E1J030176-001 ELG2J1DD-MSD
 Date Sampled....: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1278202
 Prep Date.....: 10/04/01 Analysis Date...: 10/05/01
 Prep Batch #....: 1278360 Analysis Time...: 03:21
 Dilution Factor: 1 Analyst ID.....: 001464 Instrument ID...: G15

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
TPH (as Gasoline)	86	(80 - 140)				SW846 8015B
	98	(80 - 140)	13	(0-40)	(60 - 130)	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
a,a,a-Trifluorotoluene (TFT)	93	(60 - 130)

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
a,a,a-Trifluorotoluene (TFT)	99	(60 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1J030176 Work Order #....: ELG2J1DL-MS Matrix.....: SOLID
MS Lot-Sample #: E1J030176-001 ELG2J1DM-MSD
Date Sampled...: 10/02/01 19:00 Date Received..: 10/02/01 21:30 MS Run #....: 1281228
Prep Date.....: 10/04/01 Analysis Date..: 10/04/01
Prep Batch #....: 1281439 Analysis Time..: 15:47
Dilution Factor: 1 Analyst ID.....: 999998 Instrument ID..: MSD

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	103	(60 - 150)			SW846 8260B
	99	(60 - 150)	4.2	(0-30)	SW846 8260B
Benzene	108	(70 - 140)			SW846 8260B
	104	(70 - 140)	3.8	(0-30)	SW846 8260B
Trichloroethene	116	(70 - 130)			SW846 8260B
	116	(70 - 130)	0.46	(0-30)	SW846 8260B
Toluene	97	(70 - 130)			SW846 8260B
	93	(70 - 130)	4.0	(0-30)	SW846 8260B
Chlorobenzene	92	(70 - 130)			SW846 8260B
	90	(70 - 130)	1.9	(0-30)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	94	(70 - 130)
	94	(70 - 130)
1,2-Dichloroethane-d4	79	(60 - 140)
	78	(60 - 140)
Toluene-d8	89	(70 - 130)
	89	(70 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1J030176 Matrix.....: SOLID
 Date Sampled...: 10/02/01 19:00 Date Received.: 10/02/01 21:30

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
MS Lot-Sample #: E1J030176-002 Prep Batch #: 1278213							
Aluminum	NC	(70 - 115)	SW846	6010B		10/05/01	ELG2Q1A9
	NC	(70 - 115) (0-25)	SW846	6010B		10/05/01	ELG2Q1CA
Dilution Factor: 1							
Analysis Time...: 22:28 Instrument ID...: M01 Analyst ID....: 021088							
MS Run #.....: 1278098							
Arsenic	95	(75 - 115)	SW846	6010B		10/05/01	ELG2Q1CC
	93	(75 - 115) 1.4 (0-25)	SW846	6010B		10/05/01	ELG2Q1CD
Dilution Factor: 1							
Analysis Time...: 22:28 Instrument ID...: M01 Analyst ID....: 021088							
MS Run #.....: 1278098							
Antimony	38 N	(75 - 115)	SW846	6010B		10/05/01	ELG2Q1CE
	37 N	(75 - 115) 1.8 (0-25)	SW846	6010B		10/05/01	ELG2Q1CF
Dilution Factor: 1							
Analysis Time...: 22:28 Instrument ID...: M01 Analyst ID....: 021088							
MS Run #.....: 1278098							
Barium	94	(80 - 120)	SW846	6010B		10/05/01	ELG2Q1CG
	93	(80 - 120) 0.48 (0-25)	SW846	6010B		10/05/01	ELG2Q1CH
Dilution Factor: 1							
Analysis Time...: 22:28 Instrument ID...: M01 Analyst ID....: 021088							
MS Run #.....: 1278098							
Cadmium	89	(80 - 120)	SW846	6010B		10/05/01	ELG2Q1CJ
	88	(80 - 120) 0.83 (0-25)	SW846	6010B		10/05/01	ELG2Q1CK
Dilution Factor: 1							
Analysis Time...: 22:28 Instrument ID...: M01 Analyst ID....: 021088							
MS Run #.....: 1278098							
Chromium	102	(85 - 120)	SW846	6010B		10/05/01	ELG2Q1CL
	98	(85 - 120) 2.2 (0-25)	SW846	6010B		10/05/01	ELG2Q1CM
Dilution Factor: 1							
Analysis Time...: 22:28 Instrument ID...: M01 Analyst ID....: 021088							
MS Run #.....: 1278098							
Beryllium	101	(80 - 120)	SW846	6010B		10/05/01	ELG2Q1CN
	100	(80 - 120) 1.1 (0-25)	SW846	6010B		10/05/01	ELG2Q1CP
Dilution Factor: 1							
Analysis Time...: 22:28 Instrument ID...: M01 Analyst ID....: 021088							
MS Run #.....: 1278098							

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1J030176				Matrix.....: SOLID
Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30				
<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>PREPARATION- WORK</u>
Lead	94	(80 - 120)	RPD	<u>ANALYSIS DATE</u>
	93	(80 - 120) 1.2 (0-25)	SW846 6010B	10/05/01
		Dilution Factor: 1		ELG2Q1CQ
		Analysis Time...: 22:28	Instrument ID...: M01	Analyst ID.....: 021088
		MS Run #.....: 1278098		
Selenium	89	(70 - 115)	SW846 6010B	10/05/01
	89	(70 - 115) 0.72 (0-25)	SW846 6010B	10/05/01
		Dilution Factor: 1		ELG2Q1CT
		Analysis Time...: 22:28	Instrument ID...: M01	Analyst ID.....: 021088
		MS Run #.....: 1278098		
Silver	93	(80 - 120)	SW846 6010B	10/05/01
	92	(80 - 120) 1.4 (0-25)	SW846 6010B	10/05/01
		Dilution Factor: 1		ELG2Q1CW
		Analysis Time...: 22:28	Instrument ID...: M01	Analyst ID.....: 021088
		MS Run #.....: 1278098		
Cobalt	98	(80 - 120)	SW846 6010B	10/05/01
	97	(80 - 120) 1.1 (0-25)	SW846 6010B	10/05/01
		Dilution Factor: 1		ELG2Q1CX
		Analysis Time...: 22:28	Instrument ID...: M01	Analyst ID.....: 021088
		MS Run #.....: 1278098		
Copper	94	(80 - 120)	SW846 6010B	10/05/01
	94	(80 - 120) 0.04 (0-25)	SW846 6010B	10/05/01
		Dilution Factor: 1		ELG2Q1C1
		Analysis Time...: 22:28	Instrument ID...: M01	Analyst ID.....: 021088
		MS Run #.....: 1278098		
Molybdenum	95	(80 - 120)	SW846 6010B	10/05/01
	94	(80 - 120) 1.7 (0-25)	SW846 6010B	10/05/01
		Dilution Factor: 1		ELG2Q1C3
		Analysis Time...: 22:28	Instrument ID...: M01	Analyst ID.....: 021088
		MS Run #.....: 1278098		
Nickel	99	(80 - 120)	SW846 6010B	10/05/01
	97	(80 - 120) 1.4 (0-25)	SW846 6010B	10/05/01
		Dilution Factor: 1		ELG2Q1C5
		Analysis Time...: 22:28	Instrument ID...: M01	Analyst ID.....: 021088
		MS Run #.....: 1278098		

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1J030176

Date Sampled....: 10/02/01 19:00 Date Received..: 10/02/01 21:30

Matrix.....: SOLID

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #
Thallium	94	(75 - 125)		SW846 6010B	10/05/01	ELG2Q1C7
	93	(75 - 125)	0.90 (0-25)	SW846 6010B	10/05/01	ELG2Q1C8
		Dilution Factor: 1				
		Analysis Time...: 22:28		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1278098				
Vanadium	100	(80 - 120)		SW846 6010B	10/05/01	ELG2Q1A5
	98	(80 - 120)	1.2 (0-25)	SW846 6010B	10/05/01	ELG2Q1A6
		Dilution Factor: 1				
		Analysis Time...: 22:28		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1278098				
Zinc	98	(80 - 120)		SW846 6010B	10/05/01	ELG2Q1A7
	98	(80 - 120)	0.06 (0-25)	SW846 6010B	10/05/01	ELG2Q1A8
		Dilution Factor: 1				
		Analysis Time...: 22:28		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1278098				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: E1J030176 Work Order #....: ELG2Q1A3-MS Matrix.....: SOLID
MS Lot-Sample #: E1J030176-002 ELG2Q1A4-MSD
Date Sampled...: 10/02/01 19:00 Date Received..: 10/02/01 21:30 MS Run #.....: 1277146
Prep Date.....: 10/04/01 Analysis Date..: 10/05/01
Prep Batch #....: 1277315 Analysis Time..: 05:23
Dilution Factor: 1 Analyst ID....: 356074 Instrument ID..: G02

PARAMETER	PERCENT	RECOVERY	RPD	METHOD
	RECOVERY	LIMITS	RPD	
TPH (as Diesel)	91	(60 - 130)		SW846 8015B
	93	(60 - 130)	2.1	(0-35) SW846 8015B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Benzo (a) pyrene	81	(60 - 130)
	83	(60 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1J030176 Work Order #...: ELG2R1A3-MS Matrix.....: SOLID
MS Lot-Sample #: E1J030176-003 ELG2R1A4-MSD
Date Sampled...: 10/02/01 19:00 Date Received..: 10/02/01 21:30 MS Run #.....: 1281224
Prep Date.....: 10/04/01 Analysis Date..: 10/04/01
Prep Batch #...: 1281436 Analysis Time..: 20:33
Dilution Factor: 8 Analyst ID....: 999998 Instrument ID.: MSD

PARAMETER	PERCENT	RECOVERY	RPD	RPD	METHOD
	RECOVERY	LIMITS		LIMITS	
1,1-Dichloroethene	98	(60 - 140)	6.1	(0-35)	SW846 8260B
	105	(60 - 140)			SW846 8260B
Benzene	97	(60 - 130)	1.8	(0-35)	SW846 8260B
	99	(60 - 130)			SW846 8260B
Trichloroethene	96	(60 - 140)	1.3	(0-35)	SW846 8260B
	98	(60 - 140)			SW846 8260B
Toluene	0.0 NC,MS	(60 - 130)	0.0	(0-35)	SW846 8260B
	0.0 NC,MS	(60 - 130)			SW846 8260B
Chlorobenzene	94	(60 - 130)	0.50	(0-35)	SW846 8260B
	95	(60 - 130)			SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	108	(60 - 140)
	106	(60 - 140)
1,2-Dichloroethane-d4	101	(60 - 140)
	94	(60 - 140)
Toluene-d8	104	(60 - 140)
	111	(60 - 140)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: E1J030176 Work Order #...: ELG2T1A3-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J030176-004 ELG2T1A4-MSD
 Date Sampled...: 10/02/01 19:00 Date Received...: 10/02/01 21:30 MS Run #.....: 1284264
 Prep Date.....: 10/11/01 Analysis Date...: 10/15/01
 Prep Batch #:...: 1284523 Analysis Time...: 13:52
 Dilution Factor: 1 Analyst ID....: 010060 Instrument ID...: MSI

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
Acenaphthene	82	(50 - 125)			SW846 8270C
	85	(50 - 125)	3.2	(0-35)	SW846 8270C
4-Chloro-3-methylphenol	66	(50 - 110)			SW846 8270C
	70	(50 - 110)	5.9	(0-35)	SW846 8270C
2-Chlorophenol	74	(50 - 120)			SW846 8270C
	68	(50 - 120)	8.4	(0-35)	SW846 8270C
1,4-Dichlorobenzene	54	(40 - 115)			SW846 8270C
	55	(40 - 115)	2.1	(0-35)	SW846 8270C
2,4-Dinitrotoluene	94	(40 - 120)			SW846 8270C
	95	(40 - 120)	0.82	(0-35)	SW846 8270C
4-Nitrophenol	75	(10 - 120)			SW846 8270C
	83	(10 - 120)	10	(0-35)	SW846 8270C
N-Nitrosodi-n-propyl-amine	62	(40 - 120)			SW846 8270C
	69	(40 - 120)	11	(0-35)	SW846 8270C
Pentachlorophenol	62	(20 - 130)			SW846 8270C
	62	(20 - 130)	0.09	(0-35)	SW846 8270C
Phenol	69	(40 - 110)			SW846 8270C
	64	(40 - 110)	6.6	(0-35)	SW846 8270C
Pyrene	73	(50 - 140)			SW846 8270C
	64	(50 - 140)	14	(0-35)	SW846 8270C
1,2,4-Trichlorobenzene	58	(50 - 115)			SW846 8270C
	57	(50 - 115)	1.5	(0-35)	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorobiphenyl	58	(40 - 130)
	59	(40 - 130)
2-Fluorophenol	70	(50 - 115)
	65	(50 - 115)
2,4,6-Tribromophenol	76	(30 - 115)
	77	(30 - 115)
Nitrobenzene-d5	60	(45 - 115)
	63	(45 - 115)
Phenol-d5	69	(50 - 120)
	63	(50 - 120)

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: E1J030176 Work Order #...: ELG2T1A3-MS Matrix.....: SOLID
MS Lot-Sample #: E1J030176-004 ELG2T1A4-MSD

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Terphenyl-d14	65	(50 - 140)
	59	(50 - 140)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

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Subcontract Reports



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LABORATORY REPORT

Prepared For: STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705

Attention: Diane Suzuki
Project: E1J030176

Sampled: 10/02/01
Received: 10/04/01
Reported: 10/23/01

*This laboratory report is confidential and is intended for the sole use of
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Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

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CKJ0053 <Page 1 of 8>



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STL Los Angeles
 1721 S. Grand Avenue
 Santa Ana, CA 92705
 Attention: Diane Suzuki

Client Project ID: E1J030176

Report Number: CKJ0053

Sampled:10/02/01

Received:10/04/01

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/kg	ug/kg				
Sample ID: CKJ0053-01 (SP-21-100201-1 - Soil)								
Acenaphthene	EPA 8310	C1J1403	50	ND	1	10/14/01	10/15/01	
Acenaphthylene	EPA 8310	C1J1403	200	ND	1	10/14/01	10/15/01	
Anthracene	EPA 8310	C1J1403	2.0	ND	1	10/14/01	10/15/01	
Benzo(a)anthracene	EPA 8310	C1J1403	2.0	ND	1	10/14/01	10/15/01	
Benzo(a)pyrene	EPA 8310	C1J1403	2.0	ND	1	10/14/01	10/15/01	
Benzo(b)fluoranthene	EPA 8310	C1J1403	5.0	ND	1	10/14/01	10/15/01	L2
Benzo(g,h,i)perylene	EPA 8310	C1J1403	5.0	ND	1	10/14/01	10/15/01	
Benzo(k)fluoranthene	EPA 8310	C1J1403	2.0	ND	1	10/14/01	10/15/01	
Chrysene	EPA 8310	C1J1403	5.0	ND	1	10/14/01	10/15/01	
Dibenzo(a,h)anthracene	EPA 8310	C1J1403	5.0	ND	1	10/14/01	10/15/01	
Fluoranthene	EPA 8310	C1J1403	5.0	ND	1	10/14/01	10/15/01	
Fluorene	EPA 8310	C1J1403	5.0	ND	1	10/14/01	10/15/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1J1403	5.0	ND	1	10/14/01	10/15/01	
Naphthalene	EPA 8310	C1J1403	40	ND	1	10/14/01	10/15/01	
Phenanthrene	EPA 8310	C1J1403	5.0	ND	1	10/14/01	10/15/01	
Pyrene	EPA 8310	C1J1403	5.0	ND	1	10/14/01	10/15/01	
<i>Surrogate: 2-Methylanthracene (35-115%)</i>						70.6 %		
Sample ID: CKJ0053-02 (SP-21-100201-2 - Soil)								
Acenaphthene	EPA 8310	C1J1608	50	ND	1	10/16/01	10/16/01	
Acenaphthylene	EPA 8310	C1J1608	200	ND	1	10/16/01	10/16/01	
Anthracene	EPA 8310	C1J1608	2.0	ND	1	10/16/01	10/16/01	
Benzo(a)anthracene	EPA 8310	C1J1608	2.0	ND	1	10/16/01	10/16/01	
Benzo(a)pyrene	EPA 8310	C1J1608	2.0	ND	1	10/16/01	10/16/01	
Benzo(b)fluoranthene	EPA 8310	C1J1608	2.0	ND	1	10/16/01	10/16/01	
Benzo(g,h,i)perylene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Benzo(k)fluoranthene	EPA 8310	C1J1608	2.0	ND	1	10/16/01	10/16/01	
Chrysene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Dibenzo(a,h)anthracene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Fluoranthene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Fluorene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Naphthalene	EPA 8310	C1J1608	40	ND	1	10/16/01	10/16/01	
Phenanthrene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Pyrene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
<i>Surrogate: 2-Methylanthracene (35-115%)</i>						70.9 %		

Del Mar Analytical, Colton
 Clifton J. Kiser
 Project Manager

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STL Los Angeles
 1721 S. Grand Avenue
 Santa Ana, CA 92705
 Attention: Diane Suzuki

Client Project ID: E1J030176

Report Number: CKJ0053

Sampled: 10/02/01
 Received: 10/04/01

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/kg	ug/kg				
Sample ID: CKJ0053-03 (SP-23-100201-1 - Soil)								
Acenaphthene	EPA 8310	C1J1608	50	ND	1	10/16/01	10/16/01	
Acenaphthylene	EPA 8310	C1J1608	200	ND	1	10/16/01	10/16/01	
Anthracene	EPA 8310	C1J1608	2.0	ND	1	10/16/01	10/16/01	
Benzo(a)anthracene	EPA 8310	C1J1608	2.0	5.3	1	10/16/01	10/16/01	
Benzo(a)pyrene	EPA 8310	C1J1608	2.0	7.1	1	10/16/01	10/16/01	
Benzo(b)fluoranthene	EPA 8310	C1J1608	5.0	6.2	1	10/16/01	10/16/01	
Benzo(g,h,i)perylene	EPA 8310	C1J1608	5.0	5.1	1	10/16/01	10/16/01	
Benzo(k)fluoranthene	EPA 8310	C1J1608	2.0	3.3	1	10/16/01	10/16/01	
Chrysene	EPA 8310	C1J1608	5.0	7.5	1	10/16/01	10/16/01	
Dibenzo(a,h)anthracene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Fluoranthene	EPA 8310	C1J1608	5.0	15	1	10/16/01	10/16/01	
Fluorene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Naphthalene	EPA 8310	C1J1608	40	ND	1	10/16/01	10/16/01	
Phenanthrene	EPA 8310	C1J1608	5.0	6.0	1	10/16/01	10/16/01	
Pyrene	EPA 8310	C1J1608	5.0	9.6	1	10/16/01	10/16/01	
<i>Surrogate: 2-Methylanthracene (35-115%)</i>						76.9 %		
Sample ID: CKJ0053-04 (SP-23-100201-2 - Soil)								
Acenaphthene	EPA 8310	C1J1608	50	ND	1	10/16/01	10/16/01	
Acenaphthylene	EPA 8310	C1J1608	200	ND	1	10/16/01	10/16/01	
Anthracene	EPA 8310	C1J1608	2.0	ND	1	10/16/01	10/16/01	
Benzo(a)anthracene	EPA 8310	C1J1608	2.0	ND	1	10/16/01	10/16/01	
Benzo(a)pyrene	EPA 8310	C1J1608	2.0	ND	1	10/16/01	10/16/01	
Benzo(b)fluoranthene	EPA 8310	C1J1608	2.0	ND	1	10/16/01	10/16/01	
Benzo(g,h,i)perylene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Benzo(k)fluoranthene	EPA 8310	C1J1608	2.0	ND	1	10/16/01	10/16/01	
Chrysene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Dibenzo(a,h)anthracene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Fluoranthene	EPA 8310	C1J1608	5.0	7.0	1	10/16/01	10/16/01	
Fluorene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Naphthalene	EPA 8310	C1J1608	40	ND	1	10/16/01	10/16/01	
Phenanthrene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
Pyrene	EPA 8310	C1J1608	5.0	ND	1	10/16/01	10/16/01	
<i>Surrogate: 2-Methylanthracene (35-115%)</i>						74.1 %		

Del Mar Analytical, Colton
 Clifton J. Kiser
 Project Manager

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STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1J030176

Report Number: CKJ0053

Sampled: 10/02/01

Received: 10/04/01

METHOD/TEST/SAMPLE DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD	Data Limit	Qualifiers
Batch: C1J1403 Extracted: 10/14/01										
Blank Analyzed: 10/15/01 (C1J1403-BLK1)										
Acenaphthene	ND	50	ug/kg							
Acenaphthylene	ND	200	ug/kg							
Anthracene	ND	2.0	ug/kg							
Benzo(a)anthracene	ND	2.0	ug/kg							
Benzo(a)pyrene	ND	2.0	ug/kg							
Benzo(b)fluoranthene	ND	5.0	ug/kg							L2
Benzo(g,h,i)perylene	ND	5.0	ug/kg							
Benzo(k)fluoranthene	ND	2.0	ug/kg							
Chrysene	ND	5.0	ug/kg							
Dibenz(a,h)anthracene	ND	5.0	ug/kg							
Fluoranthene	ND	5.0	ug/kg							
Fluorene	ND	5.0	ug/kg							
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/kg							
Naphthalene	ND	40	ug/kg							
Phenanthrene	ND	5.0	ug/kg							
Pyrene	ND	5.0	ug/kg							
Surrogate: 2-Methylnanthracene	4.36		ug/kg	8.00		54.5	35-115			
LCS Analyzed: 10/15/01 (C1J1403-BS1)										
Acenaphthene	120	50	ug/kg	160		75.0	45-115			
Acenaphthylene	313	200	ug/kg	320		97.8	50-115			
Anthracene	9.76	2.0	ug/kg	16.0		61.0	55-115			
Benzo(a)anthracene	12.9	2.0	ug/kg	16.0		80.6	65-115			
Benzo(a)pyrene	8.46	2.0	ug/kg	16.0		52.9	55-115			L2
Benzo(b)fluoranthene	24.8	5.0	ug/kg	32.0		77.5	65-115			
Benzo(g,h,i)perylene	24.9	5.0	ug/kg	32.0		77.8	60-115			
Benzo(k)fluoranthene	12.7	2.0	ug/kg	16.0		79.4	65-115			
Chrysene	12.8	5.0	ug/kg	16.0		80.0	65-115			
Dibenz(a,h)anthracene	24.4	5.0	ug/kg	32.0		76.2	60-115			
Fluoranthene	25.0	5.0	ug/kg	32.0		78.1	65-115			
Fluorene	25.0	5.0	ug/kg	32.0		78.1	55-115			
Indeno(1,2,3-cd)pyrene	11.6	5.0	ug/kg	16.0		72.5	55-115			
Naphthalene	141	40	ug/kg	160		88.1	45-115			
Phenanthrene	15.9	5.0	ug/kg	16.0		99.4	55-120			
Pyrene	12.8	5.0	ug/kg	16.0		80.0	55-115			

Del Mar Analytical, Colton

Clifton J. Kiser

Project Manager

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STL Los Angeles
 1721 S. Grand Avenue
 Santa Ana, CA 92705
 Attention: Diane Suzuki

Client Project ID: E1J030176

Report Number: CKJ0053

Sampled: 10/02/01
 Received: 10/04/01



POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	RPD Limit	Data Qualifiers
---------	--------	-----------------	-------	-------------	---------------	------------------	---------	-----------	-----------------

Batch: C1J1403 Extracted: 10/14/01

LCS Analyzed: 10/15/01 (C1J1403-BS1)

Surrogate: 2-Methylnanthracene 4.56 ug/kg 8.00 57.0 35-115

Matrix Spike Analyzed: 10/15/01 (C1J1403-MS1)

Acenaphthene	115	50	ug/kg	160	ND	71.9	40-115		
Acenaphthylene	289	200	ug/kg	320	ND	90.3	35-130		
Anthracene	11.5	2.0	ug/kg	16.0	ND	71.9	40-115		
Benzo(a)anthracene	13.8	2.0	ug/kg	16.0	ND	84.9	45-130		
Benzo(a)pyrene	11.6	2.0	ug/kg	16.0	ND	72.5	50-115		
Benzo(b)fluoranthene	25.5	5.0	ug/kg	32.0	ND	79.7	40-130		
Benzo(g,h,i)perylene	26.2	5.0	ug/kg	32.0	ND	81.9	45-115		
Benzo(k)fluoranthene	13.0	2.0	ug/kg	16.0	ND	81.2	40-125		
Chrysene	13.4	5.0	ug/kg	16.0	ND	83.8	45-125		
Dibenzo(a,h)anthracene	25.0	5.0	ug/kg	32.0	ND	78.1	25-130		
Fluoranthene	26.7	5.0	ug/kg	32.0	ND	82.1	50-135		
Fluorene	24.9	5.0	ug/kg	32.0	ND	77.8	35-120		
Indeno(1,2,3-cd)pyrene	12.9	5.0	ug/kg	16.0	ND	80.6	40-120		
Naphthalene	133	40	ug/kg	160	ND	83.1	30-115		
Phenanthrene	13.6	5.0	ug/kg	16.0	ND	81.4	30-160		
Pyrene	13.8	5.0	ug/kg	16.0	ND	86.2	20-165		
Surrogate: 2-Methylnanthracene	5.89		ug/kg	8.00		73.6	35-115		

Matrix Spike Dup Analyzed: 10/15/01 (C1J1403-MSD1)

Acenaphthene	117	50	ug/kg	160	ND	73.1	40-115	1.72	25
Acenaphthylene	296	200	ug/kg	320	ND	92.5	35-130	2.39	25
Anthracene	11.4	2.0	ug/kg	16.0	ND	71.2	40-115	0.873	25
Benzo(a)anthracene	13.8	2.0	ug/kg	16.0	ND	84.9	45-130	0.00	20
Benzo(a)pyrene	11.3	2.0	ug/kg	16.0	ND	70.6	50-115	2.62	20
Benzo(b)fluoranthene	25.5	5.0	ug/kg	32.0	ND	79.7	40-130	0.00	25
Benzo(g,h,i)perylene	25.6	5.0	ug/kg	32.0	ND	80.0	45-115	2.32	20
Benzo(k)fluoranthene	13.0	2.0	ug/kg	16.0	ND	81.2	40-125	0.00	25
Chrysene	13.6	5.0	ug/kg	16.0	ND	85.0	45-125	1.48	30
Dibenzo(a,h)anthracene	24.9	5.0	ug/kg	32.0	ND	77.8	25-130	0.401	30
Fluoranthene	26.8	5.0	ug/kg	32.0	ND	82.4	50-135	0.374	25
Fluorene	25.3	5.0	ug/kg	32.0	ND	79.1	35-120	1.59	20
Indeno(1,2,3-cd)pyrene	12.1	5.0	ug/kg	16.0	ND	75.6	40-120	6.40	20

Del Mar Analytical, Colton
 Clifton J. Kiser
 Project Manager

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STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1J030176

Report Number: CKJ0053

Sampled: 10/02/01

Received: 10/04/01



POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-----------------

Batch: C1J1403 Extracted: 10/14/01

Matrix Spike Dup Analyzed: 10/15/01 (C1J1403-MSD1)

Naphthalene	135	40	ug/kg	160	ND	84.4	30-115	1.49	25
Phenanthrene	14.9	5.0	ug/kg	16.0	ND	89.6	30-160	9.12	30
Pyrene	13.7	5.0	ug/kg	16.0	ND	85.6	20-165	0.727	20
Surrogate: 2-Methylanthracene	5.77		ug/kg	8.00		72.1	35-115		

Source: CKJ0053-01

Batch: C1J1608 Extracted: 10/16/01

Blank Analyzed: 10/16/01 (C1J1608-BLK1)

Acenaphthene	ND	50	ug/kg						
Acenaphthylene	ND	200	ug/kg						
Anthracene	ND	2.0	ug/kg						
Benzo(a)anthracene	ND	2.0	ug/kg						
Benzo(a)pyrene	ND	2.0	ug/kg						
Benzo(b)fluoranthene	ND	5.0	ug/kg						
Benzo(g,h,i)perylene	ND	5.0	ug/kg						
Benzo(k)fluoranthene	ND	2.0	ug/kg						
Chrysene	ND	5.0	ug/kg						
Dibenzo(a,h)anthracene	ND	5.0	ug/kg						
Fluoranthene	ND	5.0	ug/kg						
Fluorene	ND	5.0	ug/kg						
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/kg						
Naphthalene	ND	40	ug/kg						
Phenanthrene	ND	5.0	ug/kg						
Pyrene	ND	5.0	ug/kg						
Surrogate: 2-Methylanthracene	5.59		ug/kg	8.00		69.9	35-115		

LCS Analyzed: 10/16/01 (C1J1608-BS1)

Acenaphthene	136	50	ug/kg	160		85.0	45-115	M-NR
Acenaphthylene	345	200	ug/kg	320		108	50-115	
Anthracene	11.7	2.0	ug/kg	16.0		73.1	55-115	
Benzo(a)anthracene	14.5	2.0	ug/kg	16.0		90.6	65-115	
Benzo(a)pyrene	11.6	2.0	ug/kg	16.0		72.5	55-115	
Benzo(b)fluoranthene	27.1	5.0	ug/kg	32.0		84.7	65-115	
Benzo(g,h,i)perylene	27.7	5.0	ug/kg	32.0		86.6	60-115	
Benzo(k)fluoranthene	14.0	2.0	ug/kg	16.0		87.5	65-115	

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

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CKJ0053 <Page 6 of 8>



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
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9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 605-9596 FAX (619) 605-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1J030176

Report Number: CKJ0053

Sampled:10/02/01

Received:10/04/01



POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: C1J1608 Extracted: 10/16/01									
LCS Analyzed: 10/16/01 (C1J1608-BS1)									M-NR
Chrysene	13.9	5.0	ug/kg	16.0		86.9	65-115		
Dibenzo(a,h)anthracene	28.1	5.0	ug/kg	32.0		87.8	60-115		
Fluoranthene	27.5	5.0	ug/kg	32.0		85.9	65-115		
Fluorene	27.5	5.0	ug/kg	32.0		85.9	55-115		
Indeno(1,2,3-cd)pyrene	13.8	5.0	ug/kg	16.0		86.2	55-115		
Naphthalene	149	40	ug/kg	160		93.1	45-115		
Phenanthrene	13.2	5.0	ug/kg	16.0		82.5	55-120		
Pyrene	13.7	5.0	ug/kg	16.0		85.6	55-115		
Surrogate: 2-Methylanthracene	5.15		ug/kg	8.00		64.4	35-115		

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

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CKJ0053 <Page 7 of 8>



STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1J030176

Report Number: CKJ0053

2852 Alton Ave., Irvine, CA 92606 (949) 281-1022 FAX (949) 281-1228
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9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (658) 505-9586 FAX (658) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Sampled:10/02/01
Received:10/04/01

DATA QUALIFIERS AND DEFINITIONS

- L2** Laboratory Control Sample recovery was below method control limits. See Corrective Action Report.
- M-NR** No results were reported for the MS/MSD. The sample used for the MS/MSD required dilution due to the sample matrix. Because of this, the spike compounds were diluted below the detection limit.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- NR** Not reported.
- RPD** Relative Percent Difference

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

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CKJ0053 <Page 8 of 8>

S E V E R N
T R E N T
S E R V I C E S

October 4, 2001

STL LOT NUMBER: E1I270350
NELAP Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808
Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

Dear Mr. Zachary,

This report contains the analytical results for the sample received under chain of custody by STL Los Angeles on September 27, 2001. This sample is associated with your BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report. The PAHs by 8310 analysis was performed by Del Mar Analytical. See attached report for any related anomaly.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,



Diane Suzuki
Project Manager
CC: Project File

000074

Page 1 of **000075** *cont.* total pages in this report.

000001

STL Los Angeles is a part of Severn Trent Laboratories, Inc.



LOT NUMBER E1I270350

Nonconformance 05-02235

Affected Samples:

E1I270350 (1): BUILD_1_B_15_092701_10

Affected Methods:

8082 PCB

Case Narrative:

Both the TCX and DCB were low in the sample at 34.7% and 45.5% respectively.

Corrective Action:

Additional sample volume was provided for second reanalysis.

Nonconformance 05-02237

Affected Samples:

E1I270350 (1): BUILD_1_B_15_092701_10

Affected Methods:

8270C

Case Narrative:

Raised reporting limits is due to limited volume of sample used 18.2g of sample for 8270c analysis.



000002

**Chain of
Custody Record**

**SEVERN
TRENT
SERVICES**

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client HALEY & ALDRICH			Project Manager SCOTT ZACHARY										Date 9/27/01	Chain of Custody Number 049982						
Address 9040 FRIARS RD			Telephone Number (Area Code)/Fax Number 619-280-9210										Lab Number E11210350	Page 1 of 1						
City SAN DIEGO	State CA	Zip Code 92108	Site Contact			Lab Contact			Analysis (Attach list if more space is needed)											
Project Name and Location (State) BOEING C6 - TORRANCE			Carrier/Waybill Number																	
Contract/Purchase Order/Quote No. 27285 -001			Matrix			Containers & Preservatives			Special Instructions/ Conditions of Receipt											
Sample I.D. No. and Description (Containers for each sample may be combined on one line)			Date 9/27/01	Time 15:00	Air	Aqueous	Sed.	Soil								P.	Unpress.	H ₂ SO ₄	HNO ₃	HCl
BUILD - 1-B-15-092701-10'									XX							VOC's SVOC's	TPH	PAH	PCBs	Metals
																X	X	X	XXX	
Possible Hazard Identification													Sample Disposal							
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown													<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months <small>(A fee may be assessed if samples are retained longer than 3 months)</small>							
Turn Around Time Required													QC Requirements (Specify)							
<input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input checked="" type="checkbox"/> Other: ASAP																				
1. Relinquished By TRAVIS HAMMOND				Date 9/27/01	Time 19:00	1. Received By R.S.				Date 9/27/01		Time 19:00								
2. Relinquished By				Date	Time	2. Received By				Date		Time								
3. Relinquished By				Date	Time	3. Received By				Date		Time								
Comments SUPER-RUSH ON METALS & PCB'S - BY LUNCH FRIDAY IF POSSIBLE																				

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Comments

SUPER-RUSH ON METALS & PCB'S - BY LUNCH FRIDAY IF POSSIBLE

**STL LOS ANGELES
PROJECT RECEIPT CHECKLIST**

Date: 09-27-2001

Quantums Lot #: E1I270350

Client Name: Haley & Aldrich

Received by: Royce Suzuki

Delivered by : Client Airborne Fed Ex
 UPS DES Other

Quote #: 42295

Project: Boeing C-141

Date/Time Received: 6

Date/Time Received: 09/27/01 1900

Custody Seal Status: Intact Broken None

Custody Seal #(s): _____ No Seal #

Sample Container(s): STL-LA Client N/A

Temperature(s) (COOLER/BLANK) in °C: 4.6 4.4 deg C (CORRECTED TEMP) 4.6 deg

Thermometer Used : IR (Infra-red) Digital (Probe)

Samples: Intact Broken Other

Anomalies: No Yes (See Clouseau)

Labeled by

Labeling checked by

Turn Around Time: RUSH-24HR RUSH-48HR RUSH-72HR NORMAL AS 9/27

Short-Hold Notification: Ph Wet Chem Metals (Filter/Pres) Encore N/A ...

Outside Analysis(es) (Test/Lab/Date Sent Out) :

PAH to Del Mar

***** * LEAVE NO BLANK SPACES ; USE N/A *****

h:HCl na:Sodium Zn:Zinc Acetate/Sodium
Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field
CCl₄:Cl₂ Cl:CCl₄ Cl:Chloro-Acetyl-1:ACD/1-1:Cl filtered n/f:HNO3-Lab filtered

CGJ:Clear Glass CGB:Clear Glass AGJ:Amber AGB:Amber Glass PB: Poly Bottle E:Encore Sampler V:VOA SL:Sleeve

* Number of VOA's w/ Headspace present

LOGGED BY/DATE: 09/21/01

REVIEWED BY/DATE:

RSL 000004

EXECUTIVE SUMMARY - Detection Highlights

E1I270350

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
BUILD_1_B_15_092701_10 09/27/01 15:00 001				
Total Carbon Chain Range	5.7 J	10	mg/kg	SW846 8015B
Aroclor 1260	25 J	33	ug/kg	SW846 8082
Aroclor 1260	100	33	ug/kg	SW846 8082
C6-C8	0.13 J	1.0	mg/kg	SW846 8015B
Mercury	0.41	0.10	mg/kg	SW846 7471A
Aluminum	68.5	20.0	mg/kg	SW846 6010B
Arsenic	27.2	1.0	mg/kg	SW846 6010B
Antimony	1.4 B	6.0	mg/kg	SW846 6010B
Barium	11.2	2.0	mg/kg	SW846 6010B
Chromium	18.2	1.0	mg/kg	SW846 6010B
Lead	29.6	0.50	mg/kg	SW846 6010B
Selenium	8.1	0.50	mg/kg	SW846 6010B
Cobalt	9.5	5.0	mg/kg	SW846 6010B
Copper	43.9	2.5	mg/kg	SW846 6010B
Molybdenum	8.9	4.0	mg/kg	SW846 6010B
Nickel	188	4.0	mg/kg	SW846 6010B
Thallium	1.7	1.0	mg/kg	SW846 6010B
Vanadium	282	5.0	mg/kg	SW846 6010B
Zinc	10.1	2.0	mg/kg	SW846 6010B
Hexachlorobenzene	660 G	540	ug/kg	SW846 8270C
1,1-Dichloroethene	120	5.0	ug/kg	SW846 8260B
Methylene chloride	3.2 J	5.0	ug/kg	SW846 8260B
Trichloroethene	90	5.0	ug/kg	SW846 8260B

000005

METHODS SUMMARY

E1I270350

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Extractable Petroleum Hydrocarbons	SW846 8015B	SANA AUTO-SHAKE
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
PCBs by SW-846 8082	SW846 8082	SW846 3550
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3550B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846 5030

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

000006

SAMPLE SUMMARY

E1I270350

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
EK8XF	001	BUILD_1_B_15_092701_10	09/27/01	15:00

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

000007

HALEY & ALDRICH INC

Client Sample ID: BUILD_1_B_15_092701_10

GC Semivolatiles

Lot-Sample #....: E1I270350-001 Work Order #....: EK8XF1AA Matrix.....: SOLID
 Date Sampled...: 09/27/01 15:00 Date Received...: 09/27/01 19:00 MS Run #.....: 1271205
 Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
 Prep Batch #....: 1271404 Analysis Time...: 16:38
 Dilution Factor: 1
 Analyst ID.....: 356074 Instrument ID...: G02
 Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
C8-C9	ND	10	mg/kg	5.0
C10-C11	ND	10	mg/kg	5.0
C12-C13	ND	10	mg/kg	5.0
C14-C15	ND	10	mg/kg	5.0
C16-C17	ND	10	mg/kg	5.0
C18-C19	ND	10	mg/kg	5.0
C20-C23	ND	10	mg/kg	5.0
C24-C27	ND	10	mg/kg	5.0
C28-C31	ND	10	mg/kg	5.0
C32-C35	ND	10	mg/kg	5.0
C36-C39	ND	10	mg/kg	5.0
C40+	ND	10	mg/kg	5.0
Total Carbon Chain Range	5.7 J	10	mg/kg	5.0
<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY		
		<u>RECOVERY</u>	<u>LIMITS</u>	
Benzo(a)pyrene	68	(60 - 130)		

NOTE (S) :

J Estimated result. Result is less than RL.

000008

HALEY & ALDRICH INC

Client Sample ID: BUILD_1_B_15_092701_10

GC Volatiles

Lot-Sample #....: E1I270350-001 Work Order #....: EK8XF1AC Matrix.....: SOLID
Date Sampled...: 09/27/01 15:00 Date Received...: 09/27/01 19:00 MS Run #.....: 1271163
Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
Prep Batch #....: 1271337 Analysis Time...: 03:29
Dilution Factor: 1
Analyst ID.....: 001464 Instrument ID...: G15
Method.....: SW846 8015B

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	MDL
C6-C8	0.13 J	1.0	mg/kg	0.10
PERCENT				RECOVERY
SURROGATE	RECOVERY		LIMITS	
a,a,a-Trifluorotoluene (TFT)	90		(60 - 130)	

NOTE(S) :

J Estimated result. Result is less than RL.

000009

HALEY & ALDRICH INC

Client Sample ID: BUILD_1_B_15_092701_10

GC Semivolatiles

Lot-Sample #....: E1I270350-001 Work Order #....: EK8XF1AF Matrix.....: SOLID
 Date Sampled...: 09/27/01 15:00 Date Received...: 09/27/01 19:00 MS Run #.....: 1271135
 Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
 Prep Batch #....: 1271272 Analysis Time...: 13:30
 Dilution Factor: 1
 Analyst ID.....: 018568 Instrument ID...: G8B
 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Aroclor 1016	ND	33	ug/kg	10
Aroclor 1221	ND	33	ug/kg	10
Aroclor 1232	ND	33	ug/kg	10
Aroclor 1242	ND	33	ug/kg	10
Aroclor 1248	ND	33	ug/kg	10
Aroclor 1254	ND	33	ug/kg	10
Aroclor 1260	25 J	33	ug/kg	10
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
		(60 - 140)		
Decachlorobiphenyl	45 *	(60 - 140)		
Tetrachloro-m-xylene	35 *	(60 - 140)		

NOTE(S) :

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

000010

HALEY & ALDRICH INC

Client Sample ID: BUILD_1_B_15_092701_10

GC Semivolatiles

Lot-Sample #....: E1I270350-001 Work Order #....: EK8XF2AF Matrix.....: SOLID
 Date Sampled....: 09/27/01 15:00 Date Received...: 09/27/01 19:00 MS Run #.....: 1273017
 Prep Date.....: 09/28/01 Analysis Date...: 09/30/01
 Prep Batch #....: 1273113 Analysis Time...: 11:54
 Dilution Factor: 1
 Analyst ID.....: 018568 Instrument ID...: G8B
 Method.....: SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Aroclor 1016	ND	33	ug/kg	10
Aroclor 1221	ND	33	ug/kg	10
Aroclor 1232	ND	33	ug/kg	10
Aroclor 1242	ND	33	ug/kg	10
Aroclor 1248	ND	33	ug/kg	10
Aroclor 1254	ND	33	ug/kg	10
Aroclor 1260	100	33	ug/kg	10

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Decachlorobiphenyl	102	(60 - 140)
Tetrachloro-m-xylene	67	(60 - 140)

NOTE (S) :

Weathered AR1260.

000011

HALEY & ALDRICH INC

Client Sample ID: BUILD_1_B_15_092701_10

GC/MS Volatiles

Lot-Sample #....: E1I270350-001 Work Order #....: EK8XF1AD Matrix.....: SOLID
 Date Sampled...: 09/27/01 15:00 Date Received...: 09/27/01 19:00 MS Run #.....: 1272053
 Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
 Prep Batch #....: 1272178 Analysis Time...: 10:59
 Dilution Factor: 1
 Analyst ID.....: 999998 Instrument ID...: MSD
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	2.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	120	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	5.0
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	2.0
Methylene chloride	3.2 J	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	10
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	90	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

000012

HALEY & ALDRICH INC

Client Sample ID: BUILD_1_B_15_092701_10

GC/MS Volatiles

Lot-Sample #....: E1I270350-001 Work Order #....: EK8XF1AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	5.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
Bromofluorobenzene	144 *	(70 - 130)	
1,2-Dichloroethane-d4	101	(60 - 140)	
Toluene-d8	138 *	(70 - 130)	

NOTE (S) :

The surrogate recovery in the sample is outside control limits due to confirmed matrix effect.

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

000013

HALEY & ALDRICH INC

Client Sample ID: BUILD_1_B_15_092701_10

GC/MS Semivolatiles

Lot-Sample #....: E1I270350-001 Work Order #....: EK8XF1DC Matrix.....: SOLID
 Date Sampled...: 09/27/01 15:00 Date Received...: 09/27/01 19:00 MS Run #.....:
 Prep Date.....: 09/28/01 Analysis Date...: 09/30/01
 Prep Batch #....: 1271386 Analysis Time...: 13:26
 Dilution Factor: 1.64
 Analyst ID.....: 010060 Instrument ID...: MSE
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acenaphthene	ND G	540	ug/kg	160
Acenaphthylene	ND G	540	ug/kg	160
Anthracene	ND G	540	ug/kg	130
Benzo(a)anthracene	ND G	540	ug/kg	160
Benzo(b)fluoranthene	ND G	540	ug/kg	160
Benzo(k)fluoranthene	ND G	540	ug/kg	330
Benzo(ghi)perylene	ND G	540	ug/kg	250
Benzo(a)pyrene	ND G	540	ug/kg	110
Benzoic acid	ND G	2600	ug/kg	820
Benzyl alcohol	ND G	540	ug/kg	160
bis(2-Chloroethoxy) methane	ND G	540	ug/kg	160
bis(2-Chloroethyl)- ether	ND G	540	ug/kg	160
bis(2-Chloroisopropyl) ether	ND G	540	ug/kg	180
bis(2-Ethylhexyl) phthalate	ND G	540	ug/kg	330
4-Bromophenyl phenyl ether	ND G	540	ug/kg	130
Butyl benzyl phthalate	ND G	540	ug/kg	160
Carbazole	ND G	540	ug/kg	130
4-Chloroaniline	ND G	540	ug/kg	250
4-Chloro-3-methylphenol	ND G	540	ug/kg	160
2-Chloronaphthalene	ND G	540	ug/kg	160
2-Chlorophenol	ND G	540	ug/kg	250
4-Chlorophenyl phenyl ether	ND G	540	ug/kg	150
Chrysene	ND G	540	ug/kg	160
Dibenz(a,h)anthracene	ND G	540	ug/kg	160
Dibenzofuran	ND G	540	ug/kg	150
Di-n-butyl phthalate	ND G	540	ug/kg	160
1,2-Dichlorobenzene	ND G	540	ug/kg	210
1,3-Dichlorobenzene	ND G	540	ug/kg	210
1,4-Dichlorobenzene	ND G	540	ug/kg	210
3,3'-Dichlorobenzidine	ND G	2600	ug/kg	660
2,4-Dichlorophenol	ND G	540	ug/kg	150

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000014

HALEY & ALDRICH INC

Client Sample ID: BUILD_1_B_15_092701_10

GC/MS Semivolatiles

Lot-Sample #....: E1I270350-001 Work Order #....: EK8XF1DC Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND G	540	ug/kg	160
2,4-Dimethylphenol	ND G	540	ug/kg	160
Dimethyl phthalate	ND G	540	ug/kg	130
4,6-Dinitro- 2-methylphenol	ND G	2600	ug/kg	490
2,4-Dinitrophenol	ND G	2600	ug/kg	820
2,4-Dinitrotoluene	ND G	540	ug/kg	160
2,6-Dinitrotoluene	ND G	540	ug/kg	150
Di-n-octyl phthalate	ND G	540	ug/kg	180
Fluoranthene	ND G	540	ug/kg	110
Fluorene	ND G	540	ug/kg	150
Hexachlorobenzene	660 G	540	ug/kg	130
Hexachlorobutadiene	ND G	540	ug/kg	160
Hexachlorocyclopenta- diene	ND G	2600	ug/kg	610
Hexachloroethane	ND G	540	ug/kg	210
Indeno(1,2,3-cd)pyrene	ND G	540	ug/kg	160
Isophorone	ND G	540	ug/kg	160
2-Methylnaphthalene	ND G	540	ug/kg	150
2-Methylphenol	ND G	540	ug/kg	130
3-Methylphenol & 4-Methylphenol	ND G	540	ug/kg	160
Naphthalene	ND G	540	ug/kg	150
2-Nitroaniline	ND G	2600	ug/kg	490
3-Nitroaniline	ND G	2600	ug/kg	570
4-Nitroaniline	ND G	2600	ug/kg	330
Nitrobenzene	ND G	540	ug/kg	250
2-Nitrophenol	ND G	540	ug/kg	160
4-Nitrophenol	ND G	2600	ug/kg	660
N-Nitrosodiphenylamine	ND G	540	ug/kg	130
N-Nitrosodi-n-propyl- amine	ND G	540	ug/kg	150
Pentachlorophenol	ND G	2600	ug/kg	690
Phenanthrene	ND G	540	ug/kg	130
Phenol	ND G	540	ug/kg	160
Pyrene	ND G	540	ug/kg	200
1,2,4-Trichloro- benzene	ND G	540	ug/kg	160
2,4,5-Trichloro- phenol	ND G	540	ug/kg	160
2,4,6-Trichloro- phenol	ND G	540	ug/kg	110

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000015

HALEY & ALDRICH INC

Client Sample ID: BUILD_1_B_15_092701_10

GC/MS Semivolatiles

Lot-Sample #....: E1I270350-001 Work Order #....: EK8XF1DC Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorobiphenyl	79	(40 - 130)
2-Fluorophenol	62	(50 - 115)
2,4,6-Tribromophenol	95	(30 - 115)
Nitrobenzene-d5	67	(45 - 115)
Phenol-d5	65	(50 - 120)
Terphenyl-d14	66	(50 - 140)

NOTE(S) :

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

000016

BOE-C6-0180807

HALEY & ALDRICH INC

Client Sample ID: BUILD_1_B_15_092701_10

TOTAL Metals

Lot-Sample #....: E1I270350-001 Date Sampled....: 09/27/01 15:00 Date Received...: 09/27/01 19:00					Matrix.....: SOLID	
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 1271231						
Aluminum	68.5	20.0	mg/kg	SW846 6010B	09/28/01	EK8XF1AG
		Dilution Factor: 1		Analysis Time...: 16:00	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 1271097	MDL.....: 8.0	
Arsenic	27.2	1.0	mg/kg	SW846 6010B	09/28/01	EK8XF1AH
		Dilution Factor: 1		Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01		MS Run #.....: 1271097	MDL.....: 0.40	
Antimony	1.4 B	6.0	mg/kg	SW846 6010B	09/28/01	EK8XF1AJ
		Dilution Factor: 1		Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01		MS Run #.....: 1271097	MDL.....: 0.60	
Barium	11.2	2.0	mg/kg	SW846 6010B	09/28/01	EK8XF1AK
		Dilution Factor: 1		Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01		MS Run #.....: 1271097	MDL.....: 0.10	
Cadmium	ND	0.50	mg/kg	SW846 6010B	09/28/01	EK8XF1AL
		Dilution Factor: 1		Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01		MS Run #.....: 1271097	MDL.....: 0.060	
Chromium	18.2	1.0	mg/kg	SW846 6010B	09/28/01	EK8XF1AM
		Dilution Factor: 1		Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01		MS Run #.....: 1271097	MDL.....: 0.10	
Beryllium	ND	0.50	mg/kg	SW846 6010B	09/28/01	EK8XF1AN
		Dilution Factor: 1		Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01		MS Run #.....: 1271097	MDL.....: 0.050	
Lead	29.6	0.50	mg/kg	SW846 6010B	09/28/01	EK8XF1AP
		Dilution Factor: 1		Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01		MS Run #.....: 1271097	MDL.....: 0.30	
Selenium	8.1	0.50	mg/kg	SW846 6010B	09/28/01	EK8XF1AQ
		Dilution Factor: 1		Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01		MS Run #.....: 1271097	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	09/28/01	EK8XF1AR
		Dilution Factor: 1		Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01		MS Run #.....: 1271097	MDL.....: 0.10	

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000017

HALEY & ALDRICH INC

Client Sample ID: BUILD_1_B_15_092701_10

TOTAL Metals

Lot-Sample #....: E1I270350-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Cobalt	9.5	5.0	mg/kg		SW846 6010B	09/28/01	EK8XF1AT
		Dilution Factor: 1			Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01			MS Run #.....: 1271097	MDL.....: 0.10	
Copper	43.9	2.5	mg/kg		SW846 6010B	09/28/01	EK8XF1AU
		Dilution Factor: 1			Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01			MS Run #.....: 1271097	MDL.....: 0.40	
Molybdenum	8.9	4.0	mg/kg		SW846 6010B	09/28/01	EK8XF1AV
		Dilution Factor: 1			Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01			MS Run #.....: 1271097	MDL.....: 0.30	
Nickel	188	4.0	mg/kg		SW846 6010B	09/28/01	EK8XF1AW
		Dilution Factor: 1			Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01			MS Run #.....: 1271097	MDL.....: 0.30	
Thallium	1.7	1.0	mg/kg		SW846 6010B	09/28/01	EK8XF1AX
		Dilution Factor: 1			Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01			MS Run #.....: 1271097	MDL.....: 0.80	
Vanadium	282	5.0	mg/kg		SW846 6010B	09/28/01	EK8XF1A0
		Dilution Factor: 1			Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01			MS Run #.....: 1271097	MDL.....: 0.10	
Zinc	10.1	2.0	mg/kg		SW846 6010B	09/28/01	EK8XF1A1
		Dilution Factor: 1			Analysis Time...: 16:00	Analyst ID.....: 0210887	
		Instrument ID...: M01			MS Run #.....: 1271097	MDL.....: 1.0	
Prep Batch #....:	1271235						
Mercury	0.41	0.10	mg/kg		SW846 7471A	09/28/01	EK8XF1A2
		Dilution Factor: 1			Analysis Time...: 11:57	Analyst ID.....: 0000237	
		Instrument ID...: M04			MS Run #.....: 1271101	MDL.....: 0.020	

NOTE(S) :

B Estimated result. Result is less than RL.

000018

QC DATA ASSOCIATION SUMMARY

E1I270350

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	SW846 8015B		1271404	1271205
	SOLID	SW846 8015B		1271337	1271163
	SOLID	SW846 7471A		1271235	1271101
	SOLID	SW846 8082		1271272	1271135
	SOLID	SW846 8082		1273113	1273017
	SOLID	SW846 8260B		1272178	1272053
	SOLID	SW846 8270C		1271386	
	SOLID	SW846 6010B		1271231	1271097

000019

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #....: E1I270350
MB Lot-Sample #: E1I280000-272
Analysis Date...: 09/28/01
Dilution Factor: 1

Work Order #....: EK9KN1AA

Matrix.....: SOLID

Prep Date.....: 09/28/01
Prep Batch #....: 1271272

Analysis Time...: 12:11
Instrument ID..: G8B

Analyst ID.....: 018568

PARAMETER	REPORTING		
	RESULT	LIMIT	UNITS
Aroclor 1016	ND	33	ug/kg
Aroclor 1221	ND	33	ug/kg
Aroclor 1232	ND	33	ug/kg
Aroclor 1242	ND	33	ug/kg
Aroclor 1248	ND	33	ug/kg
Aroclor 1254	ND	33	ug/kg
Aroclor 1260	ND	33	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Decachlorobiphenyl	100	(60 - 140)	
Tetrachloro-m-xylene	74	(60 - 140)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000020

METHOD BLANK REPORT

GC Volatiles

Client Lot #....: E1I270350
MB Lot-Sample #: E1I280000-337

Analysis Date...: 09/28/01
Dilution Factor: 1

Work Order #....: EK9XE1AA

Prep Date.....: 09/28/01
Prep Batch #....: 1271337

Matrix.....: SOLID

Analysis Time..: 03:02
Instrument ID..: G15

Analyst ID.....: 001464

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	METHOD
C6-C8	ND	1.0	mg/kg	SW846 8015B
SURROGATE				
a,a,a-Trifluorotoluene (TFT)	PERCENT RECOVERY	RECOVERY LIMITS	(60 - 130)	
	81			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000021

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: E1I270350
 MB Lot-Sample #: E1I280000-386
 Analysis Date...: 09/30/01
 Dilution Factor: 1

Work Order #....: EK9771AA
 Prep Date.....: 09/28/01
 Prep Batch #....: 1271386
 Analyst ID.....: 010060

Matrix.....: SOLID
 Analysis Time..: 11:11
 Instrument ID..: MSE

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acenaphthene	ND	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	330	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Benzoic acid	ND	1600	ug/kg	SW846 8270C
Benzyl alcohol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethyl)- ether	ND	330	ug/kg	SW846 8270C
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270C
Carbazole	ND	330	ug/kg	SW846 8270C
4-Chloroaniline	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270C
Dibenzofuran	ND	330	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270C
Diethyl phthalate	ND	330	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270C
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C

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000022

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: E1I270350 Work Order #....: EK9771AA Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
4, 6-Dinitro- 2-methylphenol	ND	1600	ug/kg	SW846 8270C
2, 4-Dinitrophenol	ND	1600	ug/kg	SW846 8270C
2, 4-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
2, 6-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
Hexachlorobenzene	ND	330	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270C
Hexachlorocyclopenta- diene	ND	1600	ug/kg	SW846 8270C
Hexachloroethane	ND	330	ug/kg	SW846 8270C
Indeno(1, 2, 3-cd)pyrene	ND	330	ug/kg	SW846 8270C
Isophorone	ND	330	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270C
2-Methylphenol	ND	330	ug/kg	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	SW846 8270C
Naphthalene	ND	330	ug/kg	SW846 8270C
2-Nitroaniline	ND	1600	ug/kg	SW846 8270C
3-Nitroaniline	ND	1600	ug/kg	SW846 8270C
4-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Nitrobenzene	ND	330	ug/kg	SW846 8270C
2-Nitrophenol	ND	330	ug/kg	SW846 8270C
4-Nitrophenol	ND	1600	ug/kg	SW846 8270C
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosodi-n-propyl- amine	ND	330	ug/kg	SW846 8270C
Pentachlorophenol	ND	1600	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Phenol	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
1, 2, 4-Trichloro- benzene	ND	330	ug/kg	SW846 8270C
2, 4, 5-Trichloro- phenol	ND	330	ug/kg	SW846 8270C
2, 4, 6-Trichloro- phenol	ND	330	ug/kg	SW846 8270C
 SURROGATE				
2-Fluorobiphenyl	PERCENT RECOVERY	RECOVERY LIMITS		
2-Fluorophenol	79	(40 - 130)		
2, 4, 6-Tribromophenol	67	(50 - 115)		
	91	(30 - 115)		

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000023

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: E1I270350 Work Order #....: EK9771AA Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Nitrobenzene-d5	69	(45 - 115)		
Phenol-d5	69	(50 - 120)		
Terphenyl-d14	70	(50 - 140)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000024

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #....: E1I270350
MB Lot-Sample #: E1I280000-404
Analysis Date..: 09/28/01
Dilution Factor: 1

Work Order #....: ELAEF1AA **Matrix.....:** SOLID
Prep Date.....: 09/28/01 **Analysis Time...:** 15:20
Prep Batch #....: 1271404 **Instrument ID...:** G02
Analyst ID.....: 356074

<u>PARAMETER</u>	REPORTING			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
C8-C9	ND	10	mg/kg	SW846 8015B
C10-C11	ND	10	mg/kg	SW846 8015B
C12-C13	ND	10	mg/kg	SW846 8015B
C14-C15	ND	10	mg/kg	SW846 8015B
C16-C17	ND	10	mg/kg	SW846 8015B
C18-C19	ND	10	mg/kg	SW846 8015B
C20-C23	ND	10	mg/kg	SW846 8015B
C24-C27	ND	10	mg/kg	SW846 8015B
C28-C31	ND	10	mg/kg	SW846 8015B
C32-C35	ND	10	mg/kg	SW846 8015B
C36-C39	ND	10	mg/kg	SW846 8015B
C40+	ND	10	mg/kg	SW846 8015B
Total Carbon Chain Range	ND	10	mg/kg	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Benzo(a)pyrene	76	(60 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000025

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: E1I270350
MB Lot-Sample #: E1I290000-178
Analysis Date...: 09/28/01
Dilution Factor: 1

Work Order #....: ELC0J1AA

Matrix.....: SOLID

Prep Date.....: 09/28/01
Prep Batch #....: 1272178

Analysis Time...: 10:12
Instrument ID..: MSD

Analyst ID.....: 999998

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Acrolein	ND	100	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	10	ug/kg	SW846 8260B
Acetone	ND	25	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Vinyl acetate	ND	10	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	25	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Tetrahydrofuran	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	25	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	25	ug/kg	SW846 8260B

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000026

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1I270350 Work Order #...: ELC0J1AA Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	10	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
t-Butanol	ND	100	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>	
Bromofluorobenzene		97	(70 - 130)	
1,2-Dichloroethane-d4		88	(60 - 140)	
Toluene-d8		99	(70 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000027

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E1I270350
MB Lot-Sample #: E1I300000-113
Analysis Date...: 09/30/01
Dilution Factor: 1

Work Order #...: ELC511AA
Prep Date.....: 09/28/01
Prep Batch #: 1273113
Analyst ID.....: 018568

Matrix.....: SOLID
Analysis Time..: 10:34
Instrument ID..: G8B

PARAMETER
Aroclor 1016
Aroclor 1221
Aroclor 1232
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260

<u>RESULT</u>	REPORTING		
	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
ND	33	ug/kg	SW846 8082
ND	33	ug/kg	SW846 8082
ND	33	ug/kg	SW846 8082
ND	33	ug/kg	SW846 8082
ND	33	ug/kg	SW846 8082
ND	33	ug/kg	SW846 8082
ND	33	ug/kg	SW846 8082

SURROGATE
Decachlorobiphenyl
Tetrachloro-m-xylene

<u>PERCENT</u>	<u>RECOVERY</u>
<u>RECOVERY</u>	<u>LIMITS</u>
96	(60 - 140)
101	(60 - 140)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000028

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: E1I270350

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
MB Lot-Sample #: E1I280000-231 Prep Batch #: 1271231						
Aluminum	ND	20.0	mg/kg	SW846 6010B	09/28/01	EK9EJ1AA
		Dilution Factor: 1				
		Analysis Time...: 15:44		Analyst ID.....: 021088	Instrument ID...: M01	
Arsenic	ND	1.0	mg/kg	SW846 6010B	09/28/01	EK9EJ1AC
		Dilution Factor: 1				
		Analysis Time...: 15:44		Analyst ID.....: 021088	Instrument ID...: M01	
Antimony	ND	6.0	mg/kg	SW846 6010B	09/28/01	EK9EJ1AD
		Dilution Factor: 1				
		Analysis Time...: 15:44		Analyst ID.....: 021088	Instrument ID...: M01	
Barium	ND	2.0	mg/kg	SW846 6010B	09/28/01	EK9EJ1AE
		Dilution Factor: 1				
		Analysis Time...: 15:44		Analyst ID.....: 021088	Instrument ID...: M01	
Cadmium	ND	0.50	mg/kg	SW846 6010B	09/28/01	EK9EJ1AF
		Dilution Factor: 1				
		Analysis Time...: 15:44		Analyst ID.....: 021088	Instrument ID...: M01	
Chromium	ND	1.0	mg/kg	SW846 6010B	09/28/01	EK9EJ1AG
		Dilution Factor: 1				
		Analysis Time...: 15:44		Analyst ID.....: 021088	Instrument ID...: M01	
Beryllium	ND	0.50	mg/kg	SW846 6010B	09/28/01	EK9EJ1AH
		Dilution Factor: 1				
		Analysis Time...: 15:44		Analyst ID.....: 021088	Instrument ID...: M01	
Lead	ND	0.50	mg/kg	SW846 6010B	09/28/01	EK9EJ1AJ
		Dilution Factor: 1				
		Analysis Time...: 15:44		Analyst ID.....: 021088	Instrument ID...: M01	
Selenium	ND	0.50	mg/kg	SW846 6010B	09/28/01	EK9EJ1AK
		Dilution Factor: 1				
		Analysis Time...: 15:44		Analyst ID.....: 021088	Instrument ID...: M01	
Silver	ND	1.0	mg/kg	SW846 6010B	09/28/01	EK9EJ1AL
		Dilution Factor: 1				
		Analysis Time...: 15:44		Analyst ID.....: 021088	Instrument ID...: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B	09/28/01	EK9EJ1AM
		Dilution Factor: 1				
		Analysis Time...: 15:44		Analyst ID.....: 021088	Instrument ID...: M01	

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000029

BOE-C6-0180820

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: E1I270350

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS			ANALYSIS DATE	ORDER #
Copper	ND	2.5	mg/kg		SW846 6010B	09/28/01	EK9EJ1AN
		Dilution Factor: 1					
		Analysis Time...: 15:44			Analyst ID.....: 021088	Instrument ID...: M01	
Molybdenum	ND	4.0	mg/kg		SW846 6010B	09/28/01	EK9EJ1AP
		Dilution Factor: 1					
		Analysis Time...: 15:44			Analyst ID.....: 021088	Instrument ID...: M01	
Nickel	ND	4.0	mg/kg		SW846 6010B	09/28/01	EK9EJ1AQ
		Dilution Factor: 1					
		Analysis Time...: 15:44			Analyst ID.....: 021088	Instrument ID...: M01	
Thallium	ND	1.0	mg/kg		SW846 6010B	09/28/01	EK9EJ1AR
		Dilution Factor: 1					
		Analysis Time...: 15:44			Analyst ID.....: 021088	Instrument ID...: M01	
Vanadium	ND	5.0	mg/kg		SW846 6010B	09/28/01	EK9EJ1AT
		Dilution Factor: 1					
		Analysis Time...: 15:44			Analyst ID.....: 021088	Instrument ID...: M01	
Zinc	ND	2.0	mg/kg		SW846 6010B	09/28/01	EK9EJ1AU
		Dilution Factor: 1					
		Analysis Time...: 15:44			Analyst ID.....: 021088	Instrument ID...: M01	

MB Lot-Sample #: E1I280000-235 **Prep Batch #....:** 1271235

Mercury	ND	0.10	mg/kg	SW846 7471A	09/28/01	EK9E91AA
		Dilution Factor: 1				
		Analysis Time...: 11:54		Analyst ID.....: 000023	Instrument ID...: M04	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000030

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: E1I270350 Work Order #....: EK9771AC-LCS Matrix.....: SOLID
 LCS Lot-Sample#: E1I280000-386 EK9771AD-LCSD
 Prep Date.....: 09/28/01 Analysis Date...: 09/30/01
 Prep Batch #....: 1271386 Analysis Time...: 11:45
 Dilution Factor: 1 Instrument ID...: MSE
 Analyst ID.....: 010060

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>		<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>	<u>RPD</u>
Acenaphthene	3330	2480	ug/kg	75	
	3330	2520	ug/kg	75	1.2
4-Chloro-3-methylphenol	5000	3210	ug/kg	64	
	5000	3130	ug/kg	63	2.5
2-Chlorophenol	5000	3420	ug/kg	68	
	5000	3290	ug/kg	66	3.9
1,4-Dichlorobenzene	3330	2200	ug/kg	66	
	3330	2170	ug/kg	65	1.5
2,4-Dinitrotoluene	3330	2900	ug/kg	87	
	3330	2890	ug/kg	87	0.24
4-Nitrophenol	5000	2420	ug/kg	48	
	5000	2610	ug/kg	52	7.6
N-Nitrosodi-n-propyl-amine	3330	2260	ug/kg	68	
	3330	2240	ug/kg	67	1.1
Pentachlorophenol	5000	4000	ug/kg	80	
	5000	3960	ug/kg	79	1.0
Phenol	5000	2640	ug/kg	53	
	5000	2590	ug/kg	52	1.7
Pyrene	3330	1920	ug/kg	58	
	3330	1880	ug/kg	56	2.6
1,2,4-Trichlorobenzene	3330	2890	ug/kg	87	
	3330	2880	ug/kg	86	0.59
					SW846 8270C

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
2-Fluorobiphenyl	75	(40 - 130)
	77	(40 - 130)
2-Fluorophenol	64	(50 - 115)
	62	(50 - 115)
2,4,6-Tribromophenol	99	(30 - 115)
	102	(30 - 115)
Nitrobenzene-d5	67	(45 - 115)
	68	(45 - 115)
Phenol-d5	61	(50 - 120)
	60	(50 - 120)

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000031

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: E1I270350 Work Order #....: EK9771AC-LCS Matrix.....: SOLID
LCS Lot-Sample#: E1I280000-386 EK9771AD-LCSD

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Terphenyl-d14	62	(50 - 140)
	61	(50 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

0000032

BOE-C6-0180823

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #....: E1I270350 Work Order #....: EK9771AC-LCS Matrix.....: SOLID
LCS Lot-Sample#: E1I280000-386 EK9771AD-LCSD
Prep Date.....: 09/28/01 Analysis Date...: 09/30/01
Prep Batch #....: 1271386 Analysis Time..: 11:45
Dilution Factor: 1 Instrument ID...: MSE
Analyst ID.....: 010060

PARAMETER	PERCENT	RECOVERY	RPD	RPD	METHOD
	RECOVERY	LIMITS		LIMITS	
Acenaphthene	75	(50 - 125)			SW846 8270C
	75	(50 - 125)	1.2	(0-35)	SW846 8270C
4-Chloro-3-methylphenol	64	(50 - 110)			SW846 8270C
	63	(50 - 110)	2.5	(0-35)	SW846 8270C
2-Chlorophenol	68	(50 - 120)			SW846 8270C
	66	(50 - 120)	3.9	(0-35)	SW846 8270C
1,4-Dichlorobenzene	66	(40 - 115)			SW846 8270C
	65	(40 - 115)	1.5	(0-35)	SW846 8270C
2,4-Dinitrotoluene	87	(40 - 120)			SW846 8270C
	87	(40 - 120)	0.24	(0-35)	SW846 8270C
4-Nitrophenol	48	(10 - 120)			SW846 8270C
	52	(10 - 120)	7.6	(0-35)	SW846 8270C
N-Nitrosodi-n-propyl-amine	68	(40 - 120)			SW846 8270C
	67	(40 - 120)	1.1	(0-35)	SW846 8270C
Pentachlorophenol	80	(20 - 130)			SW846 8270C
	79	(20 - 130)	1.0	(0-35)	SW846 8270C
Phenol	53	(40 - 110)			SW846 8270C
	52	(40 - 110)	1.7	(0-35)	SW846 8270C
Pyrene	58	(50 - 140)			SW846 8270C
	56	(50 - 140)	2.6	(0-35)	SW846 8270C
1,2,4-Trichlorobenzene	87	(50 - 115)			SW846 8270C
	86	(50 - 115)	0.59	(0-35)	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorobiphenyl	75	(40 - 130)
	77	(40 - 130)
2-Fluorophenol	64	(50 - 115)
	62	(50 - 115)
2,4,6-Tribromophenol	99	(30 - 115)
	102	(30 - 115)
Nitrobenzene-d5	67	(45 - 115)
	68	(45 - 115)
Phenol-d5	61	(50 - 120)
	60	(50 - 120)

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000033

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Terphenyl-d14	62 61	(50 - 140) (50 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000034

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1I270350 Work Order #....: EK9KN1AC Matrix.....: SOLID
LCS Lot-Sample#: E1I280000-272
Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
Prep Batch #....: 1271272 Analysis Time...: 12:50
Dilution Factor: 1 Instrument ID...: G8B
Analyst ID.....: 018568

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	PERCENT <u>UNITS</u>	PERCENT <u>RECOVERY</u>	METHOD
Aroclor 1016	333	360	ug/kg	108	SW846 8082
Aroclor 1260	333	353	ug/kg	106	SW846 8082
<u>SURROGATE</u>		PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>		
Decachlorobiphenyl		114	(60 - 140)		
Tetrachloro-m-xylene		79	(60 - 140)		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000035

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: E1I270350 Work Order #....: EK9XE1AC Matrix.....: SOLID
LCS Lot-Sample#: E1I280000-337
Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
Prep Batch #:....: 1271337 Analysis Time...: 01:42
Dilution Factor: 1 Instrument ID...: G15
Analyst ID.....: 001464

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
TPH (as Gasoline)	5.00	5.85	mg/kg	117	SW846 8015B
SURROGATE		PERCENT RECOVERY		RECOVERY LIMITS	
a,a,a-Trifluorotoluene (TFT)		114		(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000036

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E1I270350 Work Order #...: ELAEF1AC Matrix.....: SOLID
LCS Lot-Sample#: E1I280000-404
Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
Prep Batch #:...: 1271404 Analysis Time...: 15:59
Dilution Factor: 1 Instrument ID...: G02
Analyst ID.....: 356074

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
TPH (as Diesel)	250	270	mg/kg	108	SW846 8015B
SURROGATE		PERCENT RECOVERY		RECOVERY LIMITS	
Benzo (a) pyrene		99		(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000037

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E1I270350	Work Order #....: ELC0J1AC	Matrix.....: SOLID
LCS Lot-Sample#: E1I290000-178		
Prep Date.....: 09/28/01	Analysis Date...: 09/28/01	
Prep Batch #....: 1272178	Analysis Time...: 09:41	
Dilution Factor: 1	Instrument ID...: MSD	
Analyst ID.....: 999998		

PARAMETER	SPIKE	MEASURED	PERCENT	METHOD
	AMOUNT	AMOUNT	UNITS	
1,1-Dichloroethene	50.0	49.7	ug/kg	99 SW846 8260B
Benzene	50.0	50.1	ug/kg	100 SW846 8260B
Trichloroethene	50.0	50.1	ug/kg	100 SW846 8260B
Toluene	50.0	46.6	ug/kg	93 SW846 8260B
Chlorobenzene	50.0	46.8	ug/kg	94 SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Bromofluorobenzene	97	(70 - 130)
1,2-Dichloroethane-d4	96	(60 - 140)
Toluene-d8	104	(70 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000038

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E1I270350 Work Order #...: ELC511AC Matrix.....: SOLID
LCS Lot-Sample#: E1I300000-113
Prep Date.....: 09/28/01 Analysis Date...: 09/30/01
Prep Batch #:...: 1273113 Analysis Time...: 11:14
Dilution Factor: 1 Instrument ID...: G8B
Analyst ID.....: 018568

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Aroclor 1016	333	350	ug/kg	105	SW846 8082
Aroclor 1260	333	337	ug/kg	101	SW846 8082
SURROGATE		PERCENT RECOVERY		RECOVERY LIMITS	
Decachlorobiphenyl		110		(60 - 140)	
Tetrachloro-m-xylene		110		(60 - 140)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000039

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1I270350

Matrix.....: SOLID

PARAMETER	SPIKE	MEASURED	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
	AMOUNT	AMOUNT				
LCS Lot-Sample#: E1I280000-231 Prep Batch #....: 1271231						
Aluminum	200	180	mg/kg	90	SW846 6010B	09/28/01 EK9EJ1AV
			Dilution Factor:	1		
			Analysis Time...:	15:50	Analyst ID.....: 021088	Instrument ID...: M01
Arsenic	200	181	mg/kg	90	SW846 6010B	09/28/01 EK9EJ1AW
			Dilution Factor:	1		
			Analysis Time...:	15:50	Analyst ID.....: 021088	Instrument ID...: M01
Antimony	50.0	38.7	mg/kg	77	SW846 6010B	09/28/01 EK9EJ1AX
			Dilution Factor:	1		
			Analysis Time...:	15:50	Analyst ID.....: 021088	Instrument ID...: M01
Barium	200	197	mg/kg	98	SW846 6010B	09/28/01 EK9EJ1A0
			Dilution Factor:	1		
			Analysis Time...:	15:50	Analyst ID.....: 021088	Instrument ID...: M01
Cadmium	5.00	4.87	mg/kg	97	SW846 6010B	09/28/01 EK9EJ1A1
			Dilution Factor:	1		
			Analysis Time...:	15:50	Analyst ID.....: 021088	Instrument ID...: M01
Chromium	20.0	20.0	mg/kg	100	SW846 6010B	09/28/01 EK9EJ1A2
			Dilution Factor:	1		
			Analysis Time...:	15:50	Analyst ID.....: 021088	Instrument ID...: M01
Beryllium	5.00	4.84	mg/kg	97	SW846 6010B	09/28/01 EK9EJ1A3
			Dilution Factor:	1		
			Analysis Time...:	15:50	Analyst ID.....: 021088	Instrument ID...: M01
Lead	50.0	45.2	mg/kg	90	SW846 6010B	09/28/01 EK9EJ1A4
			Dilution Factor:	1		
			Analysis Time...:	15:50	Analyst ID.....: 021088	Instrument ID...: M01
Selenium	200	171	mg/kg	85	SW846 6010B	09/28/01 EK9EJ1A5
			Dilution Factor:	1		
			Analysis Time...:	15:50	Analyst ID.....: 021088	Instrument ID...: M01
Silver	5.00	4.61	mg/kg	92	SW846 6010B	09/28/01 EK9EJ1A6
			Dilution Factor:	1		
			Analysis Time...:	15:50	Analyst ID.....: 021088	Instrument ID...: M01

(Continued on next page)

000040

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1I270350

Matrix.....: SOLID

PARAMETER	SPIKE	MEASURED	UNITS	PERCNT		METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
	AMOUNT	AMOUNT		RECVRY	METHOD			
Cobalt	50.0	48.1	mg/kg	96	SW846 6010B		09/28/01	EK9EJ1A7
			Dilution Factor: 1					
			Analysis Time...: 15:50			Analyst ID.....: 021088		Instrument ID...: M01
Copper	25.0	23.9	mg/kg	95	SW846 6010B		09/28/01	EK9EJ1A8
			Dilution Factor: 1					
			Analysis Time...: 15:50			Analyst ID.....: 021088		Instrument ID...: M01
Molybdenum	100	94.6	mg/kg	95	SW846 6010B		09/28/01	EK9EJ1A9
			Dilution Factor: 1					
			Analysis Time...: 15:50			Analyst ID.....: 021088		Instrument ID...: M01
Nickel	50.0	49.8	mg/kg	100	SW846 6010B		09/28/01	EK9EJ1CA
			Dilution Factor: 1					
			Analysis Time...: 15:50			Analyst ID.....: 021088		Instrument ID...: M01
Thallium	200	174	mg/kg	87	SW846 6010B		09/28/01	EK9EJ1CC
			Dilution Factor: 1					
			Analysis Time...: 15:50			Analyst ID.....: 021088		Instrument ID...: M01
Vanadium	50.0	48.9	mg/kg	98	SW846 6010B		09/28/01	EK9EJ1CD
			Dilution Factor: 1					
			Analysis Time...: 15:50			Analyst ID.....: 021088		Instrument ID...: M01
Zinc	50.0	49.1	mg/kg	98	SW846 6010B		09/28/01	EK9EJ1CE
			Dilution Factor: 1					
			Analysis Time...: 15:50			Analyst ID.....: 021088		Instrument ID...: M01
LCS Lot-Sample#: E1I280000-235 Prep Batch #....: 1271235								
Mercury	0.833	0.832	mg/kg	100	SW846 7471A		09/28/01	EK9E91AC
			Dilution Factor: 1					
			Analysis Time...: 11:55			Analyst ID.....: 000023		Instrument ID...: M04

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000041

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: E1I270350 Work Order #....: EK9KN1AC Matrix.....: SOLID
LCS Lot-Sample#: E1I280000-272
Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
Prep Batch #:....: 1271272 Analysis Time...: 12:50
Dilution Factor: 1 Instrument ID...: G8B
Analyst ID.....: 018568

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
Aroclor 1016	108	(65 - 130)	SW846 8082
Aroclor 1260	106	(70 - 130)	SW846 8082

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Decachlorobiphenyl	114	(60 - 140)
Tetrachloro-m-xylene	79	(60 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000042

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E1I270350 Work Order #...: EK9XE1AC Matrix.....: SOLID
LCS Lot-Sample#: E1I280000-337
Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
Prep Batch #:...: 1271337 Analysis Time...: 01:42
Dilution Factor: 1 Instrument ID...: G15
Analyst ID.....: 001464

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
TPH (as Gasoline)	117	(80 - 140)	SW846 8015B
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
a,a,a-Trifluorotoluene (TFT)	114	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000043

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: E1I270350 Work Order #....: ELAEF1AC Matrix.....: SOLID
LCS Lot-Sample#: E1I280000-404
Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
Prep Batch #:....: 1271404 Analysis Time...: 15:59
Dilution Factor: 1 Instrument ID...: G02
Analyst ID.....: 356074

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
TPH (as Diesel)	108	(60 - 130)	SW846 8015B
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
Benzo (a) pyrene	99	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000044

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1I270350 Work Order #....: ELC0J1AC Matrix.....: SOLID
LCS Lot-Sample#: E1I290000-178
Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
Prep Batch #....: 1272178 Analysis Time...: 09:41
Dilution Factor: 1 Instrument ID...: MSD
Analyst ID.....: 999998

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
1,1-Dichloroethene	99	(60 - 150)	SW846 8260B
Benzene	100	(70 - 140)	SW846 8260B
Trichloroethene	100	(70 - 130)	SW846 8260B
Toluene	93	(70 - 130)	SW846 8260B
Chlorobenzene	94	(70 - 130)	SW846 8260B

<u>SURROGATE</u>	<u>RECOVERY</u>	<u>PERCENT</u>	<u>RECOVERY</u>
Bromofluorobenzene	97	(70 - 130)	
1,2-Dichloroethane-d4	96	(60 - 140)	
Toluene-d8	104	(70 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000045

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: E1I270350 Work Order #....: ELC511AC Matrix.....: SOLID
LCS Lot-Sample#: E1I300000-113
Prep Date.....: 09/28/01 Analysis Date...: 09/30/01
Prep Batch #....: 1273113 Analysis Time...: 11:14
Dilution Factor: 1 Instrument ID...: G8B
Analyst ID.....: 018568

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
Aroclor 1016	105	(65 - 130)	SW846 8082
Aroclor 1260	101	(70 - 130)	SW846 8082
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>	
Decachlorobiphenyl	110	(60 - 140)	
Tetrachloro-m-xylene	110	(60 - 140)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000046

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1I270350

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: E1I280000-231 Prep Batch #....: 1271231					
Aluminum	90	(70 - 115)	SW846 6010B	09/28/01	EK9EJ1AV
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088		Instrument ID...: M01
Arsenic	90	(75 - 115)	SW846 6010B	09/28/01	EK9EJ1AW
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088		Instrument ID...: M01
Antimony	77	(75 - 115)	SW846 6010B	09/28/01	EK9EJ1AX
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088		Instrument ID...: M01
Barium	98	(80 - 120)	SW846 6010B	09/28/01	EK9EJ1A0
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088		Instrument ID...: M01
Cadmium	97	(80 - 120)	SW846 6010B	09/28/01	EK9EJ1A1
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088		Instrument ID...: M01
Chromium	100	(85 - 120)	SW846 6010B	09/28/01	EK9EJ1A2
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088		Instrument ID...: M01
Beryllium	97	(80 - 120)	SW846 6010B	09/28/01	EK9EJ1A3
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088		Instrument ID...: M01
Lead	90	(80 - 120)	SW846 6010B	09/28/01	EK9EJ1A4
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088		Instrument ID...: M01
Selenium	85	(70 - 115)	SW846 6010B	09/28/01	EK9EJ1A5
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088		Instrument ID...: M01
Silver	92	(80 - 120)	SW846 6010B	09/28/01	EK9EJ1A6
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088		Instrument ID...: M01

(Continued on next page)

000047

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1I270350

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Cobalt	96	(80 - 120)	SW846 6010B	09/28/01	EK9EJ1A7
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088	Instrument ID...: M01	
Copper	95	(80 - 120)	SW846 6010B	09/28/01	EK9EJ1A8
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088	Instrument ID...: M01	
Molybdenum	95	(80 - 120)	SW846 6010B	09/28/01	EK9EJ1A9
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088	Instrument ID...: M01	
Nickel	100	(80 - 120)	SW846 6010B	09/28/01	EK9EJ1CA
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088	Instrument ID...: M01	
Thallium	87	(75 - 125)	SW846 6010B	09/28/01	EK9EJ1CC
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088	Instrument ID...: M01	
Vanadium	98	(80 - 120)	SW846 6010B	09/28/01	EK9EJ1CD
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088	Instrument ID...: M01	
Zinc	98	(80 - 120)	SW846 6010B	09/28/01	EK9EJ1CE
		Dilution Factor: 1			
		Analysis Time...: 15:50	Analyst ID.....: 021088	Instrument ID...: M01	
LCS Lot-Sample#:	E1I280000-235	Prep Batch #....:	1271235		
Mercury	100	(85 - 115)	SW846 7471A	09/28/01	EK9E91AC
		Dilution Factor: 1			
		Analysis Time...: 11:55	Analyst ID.....: 000023	Instrument ID...: M04	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000048

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: E1I270350 **Work Order #....:** EK46T1AD-MS **Matrix.....:** SOLID
MS Lot-Sample #: E1I260206-011 EK46T1AE-MSD
Date Sampled....: 09/20/01 13:55 **Date Received...:** 09/26/01 10:20 **MS Run #.....:** 1271163
Prep Date.....: 09/28/01 **Analysis Date...:** 09/28/01
Prep Batch #....: 1271339 **Analysis Time...:** 07:54
Dilution Factor: 1 **Analyst ID.....:** 001464 **Instrument ID...:** G15

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCENT		METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	
TPH (as Gasoline)	ND	5.00	5.71	mg/kg	114	WA-DOE WTPH-G
	ND	5.00	4.93	mg/kg	99	15 WA-DOE WTPH-G
<hr/>						
SURROGATE			PERCENT	RECOVERY		
a,a,a-Trifluorotoluene			RECOVERY	LIMITS		
(TFT)			117	(60 - 130)		
			116	(60 - 130)		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000049

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

PARAMETER	SAMPLE	SPIKE	MEASRD		PERCENT		
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	ND	50.0	50.6	ug/kg	101		SW846 8260B
	ND	50.0	52.1	ug/kg	104	3.0	SW846 8260B
Benzene		50.0	51.2	ug/kg	102		SW846 8260B
		50.0	50.4	ug/kg	101	1.5	SW846 8260B
Trichloroethene	ND	50.0	54.1	ug/kg	108		SW846 8260B
	ND	50.0	54.2	ug/kg	108	0.18	SW846 8260B
Toluene		50.0	48.8	ug/kg	98		SW846 8260B
		50.0	47.9	ug/kg	96	1.9	SW846 8260B
Chlorobenzene	ND	50.0	48.5	ug/kg	97		SW846 8260B
	ND	50.0	47.3	ug/kg	95	2.5	SW846 8260B

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
Bromofluorobenzene	94	(70 - 130)
	93	(70 - 130)
1, 2-Dichloroethane-d4	92	(60 - 140)
	95	(60 - 140)
Toluene-d8	103	(70 - 130)
	101	(70 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000050

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1I270350

Matrix.....: SOLID

Date Sampled...: 09/27/01 15:00 **Date Received..:** 09/27/01 19:00

<u>SAMPLE</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCNT</u>			<u>PREPARATION-</u>		<u>WORK</u>
<u>PARAMETER</u>	<u>AMOUNT</u>	<u>AMT</u>	<u>RECVRY</u>	<u>RPD</u>	<u>METHOD</u>	<u>ANALYSIS</u>	<u>DATE</u>	<u>ORDER #</u>

MS Lot-Sample #: E1I270350-001 **Prep Batch #....:** 1271231

Aluminum

68.5	200	310	N	mg/kg	121	SW846	6010B	09/28/01	EK8XF1A3	
68.5	200	343	N	mg/kg	137	10	SW846	6010B	09/28/01	EK8XF1A4
Dilution Factor: 1										
Analysis Time...: 17:43					Instrument ID...: M01			Analyst ID.....: 021088		
MS Run #.....: 1271097										

Arsenic

27.2	200	221		mg/kg	97	SW846	6010B	09/28/01	EK8XF1A5	
27.2	200	215		mg/kg	94	2.6	SW846	6010B	09/28/01	EK8XF1A6
Dilution Factor: 1										
Analysis Time...: 17:43					Instrument ID...: M01			Analyst ID.....: 021088		
MS Run #.....: 1271097										

Antimony

1.4	50.0	32.3	N	mg/kg	62	SW846	6010B	09/28/01	EK8XF1A7	
1.4	50.0	34.6	N	mg/kg	66	6.9	SW846	6010B	09/28/01	EK8XF1A8
Dilution Factor: 1										
Analysis Time...: 17:43					Instrument ID...: M01			Analyst ID.....: 021088		
MS Run #.....: 1271097										

Barium

11.2	200	208		mg/kg	98	SW846	6010B	09/28/01	EK8XF1A9	
11.2	200	223		mg/kg	106	6.8	SW846	6010B	09/28/01	EK8XF1CA
Dilution Factor: 1										
Analysis Time...: 17:43					Instrument ID...: M01			Analyst ID.....: 021088		
MS Run #.....: 1271097										

Cadmium

ND	5.00	1.75	N	mg/kg	35	SW846	6010B	09/28/01	EK8XF1CC	
ND	5.00	2.25	N	mg/kg	45	25	SW846	6010B	09/28/01	EK8XF1CD
Dilution Factor: 1										
Analysis Time...: 17:43					Instrument ID...: M01			Analyst ID.....: 021088		
MS Run #.....: 1271097										

Chromium

18.2	20.0	57.6	N	mg/kg	197	SW846	6010B	09/28/01	EK8XF1CE	
18.2	20.0	52.7	N	mg/kg	172	8.9	SW846	6010B	09/28/01	EK8XF1CF
Dilution Factor: 1										
Analysis Time...: 17:43					Instrument ID...: M01			Analyst ID.....: 021088		
MS Run #.....: 1271097										

(Continued on next page)

000051

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1I270350

Matrix.....: SOLID

Date Sampled...: 09/27/01 15:00 Date Received...: 09/27/01 19:00

PARAMETER	SAMPLE	SPIKE	MEASURED	UNITS	PERCNT			METHOD	PREPARATION-	WORK
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	ANALYSIS DATE		ORDER #	
Beryllium										
	ND	5.00	4.44	mg/kg	89		SW846 6010B		09/28/01	EK8XF1CG
	ND	5.00	4.73	mg/kg	95	6.2	SW846 6010B		09/28/01	EK8XF1CH
	Dilution Factor: 1									
	Analysis Time...: 17:43 Instrument ID...: M01									
	MS Run #.....: 1271097									
Lead										
	29.6	50.0	94.1 N	mg/kg	129		SW846 6010B		09/28/01	EK8XF1CJ
	29.6	50.0	127 N,*	mg/kg	194	30	SW846 6010B		09/28/01	EK8XF1CK
	Dilution Factor: 1									
	Analysis Time...: 17:43 Instrument ID...: M01									
	MS Run #.....: 1271097									
Selenium										
	8.1	200	185	mg/kg	88		SW846 6010B		09/28/01	EK8XF1CL
	8.1	200	196	mg/kg	94	6.0	SW846 6010B		09/28/01	EK8XF1CM
	Dilution Factor: 1									
	Analysis Time...: 17:43 Instrument ID...: M01									
	MS Run #.....: 1271097									
Silver										
	ND	5.00	3.94 N	mg/kg	79		SW846 6010B		09/28/01	EK8XF1CN
	ND	5.00	3.94 N	mg/kg	79	0.05	SW846 6010B		09/28/01	EK8XF1CP
	Dilution Factor: 1									
	Analysis Time...: 17:43 Instrument ID...: M01									
	MS Run #.....: 1271097									
Cobalt										
	9.5	50.0	62.2	mg/kg	105		SW846 6010B		09/28/01	EK8XF1CQ
	9.5	50.0	63.9	mg/kg	109	2.7	SW846 6010B		09/28/01	EK8XF1CR
	Dilution Factor: 1									
	Analysis Time...: 17:43 Instrument ID...: M01									
	MS Run #.....: 1271097									
Copper										
	43.9	25.0	119 N	mg/kg	301		SW846 6010B		09/28/01	EK8XF1CT
	43.9	25.0	108 N	mg/kg	258	9.3	SW846 6010B		09/28/01	EK8XF1CU
	Dilution Factor: 1									
	Analysis Time...: 17:43 Instrument ID...: M01									
	MS Run #.....: 1271097									

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000052

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1I270350

Matrix.....: SOLID

Date Sampled...: 09/27/01 15:00 **Date Received...:** 09/27/01 19:00

PARAMETER	SAMPLE	SPIKE	MEASURED	UNITS	PERCNT			METHOD	PREPARATION-	WORK										
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	ANALYSIS DATE		ORDER #											
Molybdenum																				
	8.9	100	106	mg/kg	97		SW846	6010B	09/28/01	EK8XF1CV										
	8.9	100	110	mg/kg	101	3.7	SW846	6010B	09/28/01	EK8XF1CW										
	Dilution Factor: 1																			
	Analysis Time...: 17:43 Instrument ID...: M01																			
	MS Run #.....: 1271097																			
Nickel																				
	188	50.0	401	N	mg/kg	426	SW846	6010B	09/28/01	EK8XF1CX										
	188	50.0	411	N	mg/kg	445	2.4	SW846	6010B	09/28/01										
	Dilution Factor: 1																			
	Analysis Time...: 17:43 Instrument ID...: M01																			
	MS Run #.....: 1271097																			
Thallium																				
	1.7	200	162	mg/kg	80		SW846	6010B	09/28/01	EK8XF1C1										
	1.7	200	173	mg/kg	86	6.5	SW846	6010B	09/28/01	EK8XF1C2										
	Dilution Factor: 1																			
	Analysis Time...: 17:43 Instrument ID...: M01																			
	MS Run #.....: 1271097																			
Vanadium																				
	282	50.0	607	NC	mg/kg		SW846	6010B	09/28/01	EK8XF1C3										
	282	50.0	577	NC	mg/kg		SW846	6010B	09/28/01	EK8XF1C4										
	Dilution Factor: 1																			
	Analysis Time...: 17:43 Instrument ID...: M01																			
	MS Run #.....: 1271097																			
Zinc																				
	10.1	50.0	72.2	N	mg/kg	124	SW846	6010B	09/28/01	EK8XF1C5										
	10.1	50.0	74.5	N	mg/kg	129	3.1	SW846	6010B	09/28/01										
	Dilution Factor: 1																			
	Analysis Time...: 17:43 Instrument ID...: M01																			
	MS Run #.....: 1271097																			
MS Lot-Sample #: E1I270350-001 Prep Batch #....: 1271235																				
Mercury																				
	0.41	0.167	0.375	N	mg/kg	0.0	SW846	7471A	09/28/01	EK8XF1C7										
	0.41	0.167	0.492	N,*	mg/kg	51	200	SW846	7471A	09/28/01										
	Dilution Factor: 1																			
	Analysis Time...: 11:59 Instrument ID...: M04																			
	MS Run #.....: 1271101																			

(Continued on next page)

000053

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1I270350

Matrix.....: SOLID

Date Sampled....: 09/27/01 15:00 **Date Received...:** 09/27/01 19:00

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

NC The recovery and/or RPD were not calculated.

000054

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1I270350 Work Order #....: EK8XF1C9-MS Matrix.....: SOLID
MS Lot-Sample #: E1I270350-001 EK8XF1DA-MSD
 Date Sampled...: 09/27/01 15:00 Date Received...: 09/27/01 19:00 MS Run #.....: 1271135
 Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
 Prep Batch #....: 1271272 Analysis Time...: 14:10
 Dilution Factor: 1 Analyst ID.....: 018568 Instrument ID...: G8B

<u>PARAMETER</u>	SAMPLE	SPIKE	MEASRD	PERCENT			
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
Aroclor 1016	ND	333	307	ug/kg	92		SW846 8082
	ND	333	285	ug/kg	85	7.7	SW846 8082
Aroclor 1260	25	333	369	ug/kg	103		SW846 8082
	25	333	345	ug/kg	96	6.7	SW846 8082

<u>SURROGATE</u>	PERCENT		RECOVERY
	RECOVERY	LIMITS	
Decachlorobiphenyl	117	(60 - 140)	
Tetrachloro-m-xylene	109	(60 - 140)	
	90	(60 - 140)	
	85	(60 - 140)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000055

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1I270350 **Work Order #....:** EK8XF1DD-MS **Matrix.....:** SOLID
MS Lot-Sample #: E1I270350-001 **EK8XF1DE-MSD**
Date Sampled....: 09/27/01 15:00 **Date Received...:** 09/27/01 19:00 **MS Run #.....:** 1271205
Prep Date.....: 09/28/01 **Analysis Date...:** 09/28/01
Prep Batch #....: 1271404 **Analysis Time...:** 17:55
Dilution Factor: 1 **Analyst ID.....:** 356074 **Instrument ID...:** G02

PARAMETER	SAMPLE SPIKE MEASRD				PERCENT		
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	METHOD
TPH (as Diesel)	ND	250	226	mg/kg	90		SW846 8015B
	ND	250	242	mg/kg	97	6.7	SW846 8015B

SURROGATE	PERCENT			RECOVERY	
	RECOVERY			LIMITS	
Benzo (a) pyrene	65			(60 - 130)	
	58 *			(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

000056

MATRIX SPIKE SAMPLE DATA REPORT

Client Lot #...:
MS Lot-Sample #:

Work Order #...:

Matrix.....:

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD	METHOD
	288	333	288	ug/kg	7.7	SW846	8082
	664	333	664	ug/kg	6.7	SW846	8082
SURROGATE	PERCENT			RECOVERY			
	RECOVERY			LIMITS			
	343			(60 - 140)			
	82			(60 - 140)			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000057

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: E1I270350 Work Order #....: EK46T1AD-MS Matrix.....: SOLID
MS Lot-Sample #: E1I260206-011 EK46T1AE-MSD
Date Sampled...: 09/20/01 13:55 Date Received...: 09/26/01 10:20 MS Run #.....: 1271163
Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
Prep Batch #....: 1271339 Analysis Time...: 07:54
Dilution Factor: 1 Analyst ID.....: 001464 Instrument ID...: G15

PARAMETER	PERCENT	RECOVERY	RPD	LIMITS	METHOD
	RECOVERY	LIMITS			
TPH (as Gasoline)	114	(80 - 140)			WA-DOE WTPH-G
	99	(80 - 140)	15	(0-40)	WA-DOE WTPH-G
SURROGATE	PERCENT	RECOVERY			
a,a,a-Trifluorotoluene (TFT)	RECOVERY	LIMITS			
	117	(60 - 130)			
	116	(60 - 130)			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000058

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	101	(60 - 150)			SW846 8260B
	104	(60 - 150)	3.0	(0-30)	SW846 8260B
Benzene	102	(70 - 140)			SW846 8260B
	101	(70 - 140)	1.5	(0-30)	SW846 8260B
Trichloroethene	108	(70 - 130)			SW846 8260B
	108	(70 - 130)	0.18	(0-30)	SW846 8260B
Toluene	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.9	(0-30)	SW846 8260B
Chlorobenzene	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.5	(0-30)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	94	(70 - 130)
	93	(70 - 130)
1, 2-Dichloroethane-d4	92	(60 - 140)
	95	(60 - 140)
Toluene-d8	103	(70 - 130)
	101	(70 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results

Bold print denotes control parameters

000059

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1I270350

Matrix.....: SOLID

Date Sampled....: 09/27/01 15:00 **Date Received...:** 09/27/01 19:00

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK	
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #	
MS Lot-Sample #: E1I270350-001 Prep Batch #....: 1271231							
Aluminum	121 N	(70 - 115)		SW846 6010B	09/28/01	EK8XF1A3	
	137 N	(70 - 115) 10	(0-25)	SW846 6010B	09/28/01	EK8XF1A4	
		Dilution Factor: 1					
		Analysis Time...: 17:43		Instrument ID...: M01		Analyst ID.....: 021088	
		MS Run #.....: 1271097					
Arsenic	97	(75 - 115)		SW846 6010B	09/28/01	EK8XF1A5	
	94	(75 - 115) 2.6	(0-25)	SW846 6010B	09/28/01	EK8XF1A6	
		Dilution Factor: 1					
		Analysis Time...: 17:43		Instrument ID...: M01		Analyst ID.....: 021088	
		MS Run #.....: 1271097					
Antimony	62 N	(75 - 115)		SW846 6010B	09/28/01	EK8XF1A7	
	66 N	(75 - 115) 6.9	(0-25)	SW846 6010B	09/28/01	EK8XF1A8	
		Dilution Factor: 1					
		Analysis Time...: 17:43		Instrument ID...: M01		Analyst ID.....: 021088	
		MS Run #.....: 1271097					
Barium	98	(80 - 120)		SW846 6010B	09/28/01	EK8XF1A9	
	106	(80 - 120) 6.8	(0-25)	SW846 6010B	09/28/01	EK8XF1CA	
		Dilution Factor: 1					
		Analysis Time...: 17:43		Instrument ID...: M01		Analyst ID.....: 021088	
		MS Run #.....: 1271097					
Cadmium	35 N	(80 - 120)		SW846 6010B	09/28/01	EK8XF1CC	
	45 N	(80 - 120) 25	(0-25)	SW846 6010B	09/28/01	EK8XF1CD	
		Dilution Factor: 1					
		Analysis Time...: 17:43		Instrument ID...: M01		Analyst ID.....: 021088	
		MS Run #.....: 1271097					
Chromium	197 N	(85 - 120)		SW846 6010B	09/28/01	EK8XF1CE	
	172 N	(85 - 120) 8.9	(0-25)	SW846 6010B	09/28/01	EK8XF1CF	
		Dilution Factor: 1					
		Analysis Time...: 17:43		Instrument ID...: M01		Analyst ID.....: 021088	
		MS Run #.....: 1271097					
Beryllium	89	(80 - 120)		SW846 6010B	09/28/01	EK8XF1CG	
	95	(80 - 120) 6.2	(0-25)	SW846 6010B	09/28/01	EK8XF1CH	
		Dilution Factor: 1					
		Analysis Time...: 17:43		Instrument ID...: M01		Analyst ID.....: 021088	
		MS Run #.....: 1271097					

(Continued on next page)

000060

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1I270350

Matrix.....: SOLID

Date Sampled...: 09/27/01 15:00 Date Received..: 09/27/01 19:00

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Lead	129 N	(80 - 120)			SW846 6010B	09/28/01	EK8XF1CJ
	194 N,*	(80 - 120) 30	(0-25)		SW846 6010B	09/28/01	EK8XF1CK
		Dilution Factor: 1					
		Analysis Time...: 17:43			Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1271097					
Selenium	88	(70 - 115)			SW846 6010B	09/28/01	EK8XF1CL
	94	(70 - 115) 6.0	(0-25)		SW846 6010B	09/28/01	EK8XF1CM
		Dilution Factor: 1					
		Analysis Time...: 17:43			Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1271097					
Silver	79 N	(80 - 120)			SW846 6010B	09/28/01	EK8XF1CN
	79 N	(80 - 120) 0.05	(0-25)		SW846 6010B	09/28/01	EK8XF1CP
		Dilution Factor: 1					
		Analysis Time...: 17:43			Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1271097					
Cobalt	105	(80 - 120)			SW846 6010B	09/28/01	EK8XF1CQ
	109	(80 - 120) 2.7	(0-25)		SW846 6010B	09/28/01	EK8XF1CR
		Dilution Factor: 1					
		Analysis Time...: 17:43			Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1271097					
Copper	301 N	(80 - 120)			SW846 6010B	09/28/01	EK8XF1CT
	258 N	(80 - 120) 9.3	(0-25)		SW846 6010B	09/28/01	EK8XF1CU
		Dilution Factor: 1					
		Analysis Time...: 17:43			Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1271097					
Molybdenum	97	(80 - 120)			SW846 6010B	09/28/01	EK8XF1CV
	101	(80 - 120) 3.7	(0-25)		SW846 6010B	09/28/01	EK8XF1CW
		Dilution Factor: 1					
		Analysis Time...: 17:43			Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1271097					
Nickel	426 N	(80 - 120)			SW846 6010B	09/28/01	EK8XF1CX
	445 N	(80 - 120) 2.4	(0-25)		SW846 6010B	09/28/01	EK8XF1CO
		Dilution Factor: 1					
		Analysis Time...: 17:43			Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1271097					

(Continued on next page)

000061

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1I270350

Matrix.....: SOLID

Date Sampled...: 09/27/01 15:00 **Date Received..:** 09/27/01 19:00

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #
Thallium	80	(75 - 125)		SW846 6010B	09/28/01	EK8XF1C1
	86	(75 - 125)	6.5 (0-25)	SW846 6010B	09/28/01	EK8XF1C2
		Dilution Factor: 1				
		Analysis Time...: 17:43		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1271097				
Vanadium	NC	(80 - 120)		SW846 6010B	09/28/01	EK8XF1C3
	NC	(80 - 120)	(0-25)	SW846 6010B	09/28/01	EK8XF1C4
		Dilution Factor: 1				
		Analysis Time...: 17:43		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1271097				
Zinc	124 N	(80 - 120)		SW846 6010B	09/28/01	EK8XF1C5
	129 N	(80 - 120)	3.1 (0-25)	SW846 6010B	09/28/01	EK8XF1C6
		Dilution Factor: 1				
		Analysis Time...: 17:43		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1271097				
MS Lot-Sample #: E1I270350-001 Prep Batch #....: 1271235						
Mercury	0.0 N	(80 - 120)		SW846 7471A	09/28/01	EK8XF1C7
	51 N,*	(80 - 120)	200 (0-20)	SW846 7471A	09/28/01	EK8XF1C8
		Dilution Factor: 1				
		Analysis Time...: 11:59		Instrument ID...: M04		Analyst ID.....: 000023
		MS Run #.....: 1271101				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

NC The recovery and/or RPD were not calculated.

000062

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: E1I270350 Work Order #....: EK8XF1C9-MS Matrix.....: SOLID
MS Lot-Sample #: E1I270350-001 EK8XF1DA-MSD
Date Sampled...: 09/27/01 15:00 Date Received...: 09/27/01 19:00 MS Run #.....: 1271135
Prep Date.....: 09/28/01 Analysis Date...: 09/28/01
Prep Batch #....: 1271272 Analysis Time...: 14:10
Dilution Factor: 1 Analyst ID.....: 018568 Instrument ID...: G8B

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	92	(65 - 130)	7.7	(0-30)	SW846 8082
	85	(65 - 130)			SW846 8082
Aroclor 1260	103	(70 - 130)	6.7	(0-30)	SW846 8082
	96	(70 - 130)			SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	117	(60 - 140)
Tetrachloro-m-xylene	109	(60 - 140)
	90	(60 - 140)
	85	(60 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000063

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
TPH (as Diesel)	90	(60 - 130)			SW846 8015B
	97	(60 - 130)	6.7	(0-35)	SW846 8015B
SURROGATE		<u>PERCENT RECOVERY</u>		<u>RECOVERY LIMITS</u>	
Benzo(a)pyrene		65		(60 - 130)	
		58 *		(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

000064

MATRIX SPIKE SAMPLE EVALUATION REPORT

Client Lot #...:
MS Lot-Sample #:

Work Order #...:

Matrix.....:

PARAMETER	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u> (65 - 130)	RPD	RPD <u>LIMITS</u> (0-30)	METHOD
		(70 - 130)	7.7	(0-30)	SW846 8082
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>			
	343	(60 - 140)			
	82	(60 - 140)			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000065

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Lot-Sample #....: E1I270350 Work Order #....: EK8XF2C9 Matrix.....: SOLID
MS Lot-Sample #: E1I270350-001
Date Sampled...: 09/27/01 15:00 Date Received...: 09/27/01 19:00
Prep Date.....: 09/28/01 Analysis Date...: 09/30/01
Prep Batch #....: 1273113 MS Run #.....: 1273017
Dilution Factor: 1 Analyst ID.....: 018568 Instrument ID..: G8B

PARAMETER	SAMPLE SPIKE MEASRD				PERCENT	
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	METHOD
Aroclor 1016	309	333	309	ug/kg	0	SW846 8082
Aroclor 1260	324	333	324	ug/kg	0	SW846 8082

SURROGATE	PERCENT		RECOVERY
	RECOVERY	LIMITS	
Decachlorobiphenyl	103	(60 - 140)	
Tetrachloro-m-xylene	95	(60 - 140)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000066

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Lot-Sample #....: E1I270350 Work Order #....: EK8XF2C9 Matrix.....: SOLID
MS Lot-Sample #: E1I270350-001
Date Sampled...: 09/27/01 15:00 Date Received...: 09/27/01 19:00
Prep Date.....: 09/28/01 Analysis Date...: 09/30/01
Prep Batch #....: 1273113 MS Run #.....: 1273017
Dilution Factor: 1 Analyst ID.....: 018568 Instrument ID.: G8B

PARAMETER	PERCENT	RECOVERY	METHOD
	RECOVERY	LIMITS	
Aroclor 1016	0	(65 - 130)	SW846 8082
Aroclor 1260	0	(70 - 130)	SW846 8082

SURROGATE	PERCENT	RECOVERY	METHOD
	RECOVERY	LIMITS	
Decachlorobiphenyl	103	(60 - 140)	
Tetrachloro-m-xylene	95	(60 - 140)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000067

Subcontracted

Analysis

000068



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
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LABORATORY REPORT

Prepared For: STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705

Attention: Diane Suzuki
Project: E1I270350

Sampled: 09/27/01
Received: 09/28/01
Reported: 10/01/01

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Del Mar Analytical, Colton
Linton J. Kiser
Project Manager

000069

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CKI0292 <Page 1 of 5>

BOE-C6-0180860



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STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1I270350

Report Number: CKI0292

Sampled:09/27/01

Received:09/28/01

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
				ug/kg		ug/kg		
Sample ID: CKI0292-01 (BUILD_1_B_15_092701-10 - Soil)								
cenaphthene	EPA 8310	C1J0101	200	ND	4	10/1/01	10/1/01	
cenaphthylene	EPA 8310	C1J0101	800	ND	4	10/1/01	10/1/01	
nthracene	EPA 8310	C1J0101	8.0	ND	4	10/1/01	10/1/01	
enzo(a)anthracene	EPA 8310	C1J0101	8.0	10	4	10/1/01	10/1/01	
enzo(a)pyrene	EPA 8310	C1J0101	8.0	11	4	10/1/01	10/1/01	
enzo(b)fluoranthene	EPA 8310	C1J0101	20	ND	4	10/1/01	10/1/01	
enzo(g,h,i)perylene	EPA 8310	C1J0101	20	ND	4	10/1/01	10/1/01	
enzo(k)fluoranthene	EPA 8310	C1J0101	8.0	ND	4	10/1/01	10/1/01	
hrysene	EPA 8310	C1J0101	20	ND	4	10/1/01	10/1/01	
ibenzo(a,h)anthracene	EPA 8310	C1J0101	20	ND	4	10/1/01	10/1/01	
uoranthene	EPA 8310	C1J0101	20	29	4	10/1/01	10/1/01	
uorene	EPA 8310	C1J0101	20	ND	4	10/1/01	10/1/01	
deno(1,2,3-cd)pyrene	EPA 8310	C1J0101	20	ND	4	10/1/01	10/1/01	
aphthalene	EPA 8310	C1J0101	160	ND	4	10/1/01	10/1/01	
nenanthrene	EPA 8310	C1J0101	20	ND	4	10/1/01	10/1/01	
rene	EPA 8310	C1J0101	20	25	4	10/1/01	10/1/01	
Surrogate: 2-Methylanthracene (35-115%)						63.8 %		

Del Mar Analytical, Colton
Jeffon J. Kiser
Object Manager

000070

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CKI0292 <Page 2 of 5>



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
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 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-9596 FAX (858) 505-9689
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles
 721 S. Grand Avenue
 Santa Ana, CA 92705
 Attention: Diane Suzuki

Client Project ID: E1I270350

Report Number: CKI0292

Sampled:09/27/01

Received:09/28/01

METHOD BLANK/OC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
---------	--------	-----------------	-------	-------------	---------------	-----------	-------------	---------	-----------	-----------------

Batch: C1J0101 Extracted: 10/01/01

Blank Analyzed: 10/01/01 (C1J0101-BLK1)

enaphthalene	ND	50	ug/kg							
enaphthylene	ND	200	ug/kg							
anthracene	ND	2.0	ug/kg							
benzo(a)anthracene	ND	2.0	ug/kg							
benzo(a)pyrene	ND	2.0	ug/kg							
benzo(b)fluoranthene	ND	5.0	ug/kg							
benzo(g,h,i)perylene	ND	5.0	ug/kg							
benzo(k)fluoranthene	ND	2.0	ug/kg							
erysene	ND	5.0	ug/kg							
dibenz(a,h)anthracene	ND	5.0	ug/kg							
floranthene	ND	5.0	ug/kg							
orene	ND	5.0	ug/kg							
eno(1,2,3-cd)pyrene	ND	5.0	ug/kg							
naphthalene	ND	40	ug/kg							
phenanthrene	ND	5.0	ug/kg							
rene	ND	5.0	ug/kg							
surrogate: 2-Methylanthracene	5.54		ug/kg	8.00		69.2		35-115		

BS Analyzed: 10/01/01 (C1J0101-BS1)

enaphthalene	116	50	ug/kg	160		72.5		45-115		
enaphthylene	301	200	ug/kg	320		94.1		50-115		
thracene	11.2	2.0	ug/kg	16.0		70.0		55-115		
benzo(a)anthracene	14.2	2.0	ug/kg	16.0		88.8		65-115		
benzo(a)pyrene	11.9	2.0	ug/kg	16.0		74.4		55-115		
benzo(b)fluoranthene	27.9	5.0	ug/kg	32.0		87.2		65-115		
benzo(g,h,i)perylene	26.2	5.0	ug/kg	32.0		81.9		60-115		
benzo(k)fluoranthene	13.2	2.0	ug/kg	16.0		82.5		65-115		
hrysene	14.4	5.0	ug/kg	16.0		90.0		65-115		
benzo(a,h)anthracene	29.8	5.0	ug/kg	32.0		93.1		60-115		
oranthane	27.6	5.0	ug/kg	32.0		86.2		65-115		
luorene	24.6	5.0	ug/kg	32.0		76.9		55-115		
eno(1,2,3-cd)pyrene	13.8	5.0	ug/kg	16.0		86.2		55-115		
phthalene	142	40	ug/kg	160		88.8		45-115		
henanthrene	13.0	5.0	ug/kg	16.0		81.2		55-120		
vrene	13.4	5.0	ug/kg	16.0		83.8		55-115		

Del Mar Analytical, Colton
 Clifton J. Kiser
 Project Manager

000071

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CKI0292 <Page 3 of 5>



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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1I270350

Report Number: CKI0292

Sampled:09/27/01

Received:09/28/01

METHOD/BLANK/QC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	Data Limit Qualifiers
<u>Batch: C1J0101 Extracted: 10/01/01</u>									
CS Analyzed: 10/01/01 (C1J0101-BS1)									
Surrogate: 2-Methylnanthracene	5.49		ug/kg	8.00		68.6	35-115		

Del Mar Analytical, Colton
Milton J. Kiser
Project Manager

000072

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CKI0292 <Page 4 of 5>

BOE-C6-0180863



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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles
721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1I270350
Report Number: CKI0292

Sampled:09/27/01
Received:09/28/01

DATA QUALIFIERS AND DEFINITIONS

- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
NR Not reported.
RPD Relative Percent Difference

Del Mar Analytical, Colton
Jeffton J. Kiser
Project Manager

000073

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CKI0292 <Page 5 of 5>

BOE-C6-0180864

SEVERN
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SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

October 10, 2001

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

STL LOT NUMBER: E1J020150
NELAP Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 220
San Diego, CA 92108

Dear Mr. Zachary,

This report contains the analytical results for the sample requested on October 2, 2001. This sample is associated with your BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures met method-specified acceptance criteria. Any matrix related anomaly is footnoted within the report. The PAHs by 8310 analysis was performed by Del Mar Analytical. See attached report for any related anomaly.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,



Diane Suzuki
Project Manager
CC: Project File

Page 1 of **000069** total pages in this report.

000001

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CHANGE ORDER

Lab Analysis No.	E1J020150
Client Name	Haley & Aldrich
Contact	Travis Hammond

- CANCEL Work
 - ADD Work
 - Chain of Custody Discrepancy
 - TAT Change
 - Matrix
 - Sample Problem
 - Tests Not Defined
 - Other

EXPLANATION/RESOLUTION
EI I 280358 - 004

Bldg - 1-B-15-092801-16'

Analyze for CCR metals (AS)
Pb, S260 VOC, S270 SVOC
TPH CC, PAH

JSRP

Initiated By:

1

Received By:

Date/Time:

10/1/01

Date/Time:

Distribution:

Original - Sample Control/Job Folder Yellow - Job: Pink - Initiative

000002

SEVERN
TRENT
SERVICES

Analytical Report

000004

EXECUTIVE SUMMARY - Detection Highlights

E1J020150

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
BLDG_1_B15_092701_16 09/28/01 10:00	001			
C20-C23	8.5 J	10	mg/kg	SW846 8015B
C24-C27	13	10	mg/kg	SW846 8015B
C28-C31	9.1 J	10	mg/kg	SW846 8015B
C32-C35	9.6 J	10	mg/kg	SW846 8015B
C36-C39	6.7 J	10	mg/kg	SW846 8015B
C40+	7.2 J	10	mg/kg	SW846 8015B
Total Carbon Chain Range	62	10	mg/kg	SW846 8015B
Aroclor 1260	64	33	ug/kg	SW846 8082
C6-C8	0.17 J,B	1.0	mg/kg	SW846 8015B
Mercury	0.060 B	0.10	mg/kg	SW846 7471A
Aluminum	24100	20.0	mg/kg	SW846 6010B
Arsenic	4.6	1.0	mg/kg	SW846 6010B
Antimony	0.77 B	6.0	mg/kg	SW846 6010B
Barium	175	2.0	mg/kg	SW846 6010B
Cadmium	0.24 B	0.50	mg/kg	SW846 6010B
Chromium	30.3	1.0	mg/kg	SW846 6010B
Beryllium	0.67	0.50	mg/kg	SW846 6010B
Lead	97.1	0.50	mg/kg	SW846 6010B
Cobalt	12.9	5.0	mg/kg	SW846 6010B
Copper	34.4	2.5	mg/kg	SW846 6010B
Molybdenum	0.83 B	4.0	mg/kg	SW846 6010B
Nickel	31.9	4.0	mg/kg	SW846 6010B
Vanadium	72.6	5.0	mg/kg	SW846 6010B
Zinc	87.7	2.0	mg/kg	SW846 6010B
Anthracene	86 J	330	ug/kg	SW846 8270C
Benzo (a) anthracene	1100	330	ug/kg	SW846 8270C
Benzo (b) fluoranthene	2100	330	ug/kg	SW846 8270C
Benzo (k) fluoranthene	220 J	330	ug/kg	SW846 8270C
Benzo (ghi) perylene	720	330	ug/kg	SW846 8270C
Benzo (a) pyrene	1200	330	ug/kg	SW846 8270C
Chrysene	1300	330	ug/kg	SW846 8270C
Fluoranthene	1600	330	ug/kg	SW846 8270C
Indeno (1, 2, 3-cd) pyrene	670	330	ug/kg	SW846 8270C
Phenanthrene	460	330	ug/kg	SW846 8270C
Pyrene	1500	330	ug/kg	SW846 8270C
1,2-Dichloroethane	1.2 J	5.0	ug/kg	SW846 8260B

000005

METHODS SUMMARY

E1J020150

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Extractable Petroleum Hydrocarbons	SW846 8015B	SANA AUTO-SHAKE
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
PCBs by SW-846 8082	SW846 8082	SW846 3550
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3550B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846 5030

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

000006

SAMPLE SUMMARY

E1J020150

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
ELE2N	001	BLDG_1_B15_092701_16	09/28/01	10:00

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

000007

HALEY & ALDRICH INC

Client Sample ID: BLDG_1_B15_092701_16

GC Semivolatiles

Lot-Sample #....: E1J020150-001 Work Order #....: ELE2N1AA Matrix.....: SOLID
 Date Sampled...: 09/28/01 10:00 Date Received...: 09/28/01 17:45 MS Run #.....: 1275157
 Prep Date.....: 10/02/01 Analysis Date...: 10/03/01
 Prep Batch #....: 1275319 Analysis Time...: 10:32
 Dilution Factor: 1
 Analyst ID.....: 356074 Instrument ID...: G02
 Method.....: SW846 8015B

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	MDL
C8-C9	ND	10	mg/kg	5.0
C10-C11	ND	10	mg/kg	5.0
C12-C13	ND	10	mg/kg	5.0
C14-C15	ND	10	mg/kg	5.0
C16-C17	ND	10	mg/kg	5.0
C18-C19	ND	10	mg/kg	5.0
C20-C23	8.5 J	10	mg/kg	5.0
C24-C27	13	10	mg/kg	5.0
C28-C31	9.1 J	10	mg/kg	5.0
C32-C35	9.6 J	10	mg/kg	5.0
C36-C39	6.7 J	10	mg/kg	5.0
C40+	7.2 J	10	mg/kg	5.0
Total Carbon Chain Range	62	10	mg/kg	5.0
SURROGATE	PERCENT	RECOVERY		
	RECOVERY	LIMITS		
Benzo(a)pyrene	110	(60 - 130)		

NOTE (S) :

J Estimated result. Result is less than RL.

000008

HALEY & ALDRICH INC

Client Sample ID: BLDG_1_B15_092701_16

GC Volatiles

Lot-Sample #....: E1J020150-001 Work Order #....: ELE2N1AC Matrix.....: SOLID
Date Sampled...: 09/28/01 10:00 Date Received...: 09/28/01 17:45 MS Run #.....: 1276107
Prep Date.....: 10/02/01 Analysis Date...: 10/02/01
Prep Batch #....: 1276276 Analysis Time...: 13:27
Dilution Factor: 1
Analyst ID.....: 001464 Instrument ID...: G15
Method.....: SW846 8015B

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	MDL
C6-C8	0.17 J,B	1.0	mg/kg	0.10
PERCENT				RECOVERY
RECOVERY				LIMITS
SURROGATE a,a,a-Trifluorotoluene (TFT)	91 (60 - 130)			

NOTE (S) :

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

000009

HALEY & ALDRICH INC

Client Sample ID: BLDG_1_B15_092701_16

GC Semivolatiles

Lot-Sample #....: E1J020150-001 Work Order #....: ELE2N1AG Matrix.....: SOLID
 Date Sampled...: 09/28/01 10:00 Date Received...: 09/28/01 17:45 MS Run #.....: 1275151
 Prep Date.....: 10/02/01 Analysis Date...: 10/02/01
 Prep Batch #....: 1275312 Analysis Time...: 16:00
 Dilution Factor: 1
 Analyst ID.....: 018568 Instrument ID...: G8B
 Method.....: SW846 8082

<u>PARAMETER</u>	REPORTING			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Aroclor 1016	ND	33	ug/kg	10
Aroclor 1221	ND	33	ug/kg	10
Aroclor 1232	ND	33	ug/kg	10
Aroclor 1242	ND	33	ug/kg	10
Aroclor 1248	ND	33	ug/kg	10
Aroclor 1254	ND	33	ug/kg	10
Aroclor 1260	64	33	ug/kg	10

<u>SURROGATE</u>	PERCENT		RECOVERY	
	<u>RECOVERY</u>	<u>LIMITS</u>		
Decachlorobiphenyl	122	(60 - 140)		
Tetrachloro-m-xylene	97	(60 - 140)		

000010

HALEY & ALDRICH INC

Client Sample ID: BLDG_1_B15_092701_16

GC/MS Volatiles

Lot-Sample #....: E1J020150-001 Work Order #....: ELE2N1AD Matrix.....: SOLID
 Date Sampled....: 09/28/01 10:00 Date Received...: 09/28/01 17:45 MS Run #.....: 1275263
 Prep Date.....: 10/02/01 Analysis Date...: 10/02/01
 Prep Batch #....: 1275504 Analysis Time...: 13:53
 Dilution Factor: 1
 Analyst ID.....: 999998 Instrument ID...: MSD
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	2.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	5.0
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	2.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	10
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	1.2 J	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

000011

HALEY & ALDRICH INC

Client Sample ID: BLDG_1_B15_092701_16

GC/MS Volatiles

Lot-Sample #....: E1J020150-001 Work Order #....: ELE2N1AD Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	5.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0

SURROGATE	PERCENT RECOVERY	RECOVERY
		LIMITS
Bromofluorobenzene	99	(70 - 130)
1,2-Dichloroethane-d4	78	(60 - 140)
Toluene-d8	93	(70 - 130)

NOTE(S) :

J Estimated result. Result is less than RL.

000012

HALEY & ALDRICH INC

Client Sample ID: BLDG_1_B15_092701_16

GC/MS Semivolatiles

Lot-Sample #....: E1J020150-001 Work Order #....: ELE2N1AE Matrix.....: SOLID
 Date Sampled...: 09/28/01 10:00 Date Received...: 09/28/01 17:45 MS Run #.....: 1275162
 Prep Date.....: 10/02/01 Analysis Date...: 10/03/01
 Prep Batch #....: 1275325 Analysis Time...: 10:11
 Dilution Factor: 1
 Analyst ID.....: 004648 Instrument ID...: MSI
 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acenaphthene	ND	330	ug/kg	100
Acenaphthylene	ND	330	ug/kg	100
Anthracene	86 J	330	ug/kg	80
Benzo (a) anthracene	1100	330	ug/kg	100
Benzo (b) fluoranthene	2100	330	ug/kg	100
Benzo (k) fluoranthene	220 J	330	ug/kg	200
Benzo (ghi) perylene	720	330	ug/kg	150
Benzo (a) pyrene	1200	330	ug/kg	70
Benzoic acid	ND	1600	ug/kg	500
Benzyl alcohol	ND	330	ug/kg	100
bis(2-Chloroethoxy) methane	ND	330	ug/kg	100
bis(2-Chloroethyl)- ether	ND	330	ug/kg	100
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	110
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	200
4-Bromophenyl phenyl ether	ND	330	ug/kg	80
Butyl benzyl phthalate	ND	330	ug/kg	100
Carbazole	ND	330	ug/kg	80
4-Chloroaniline	ND	330	ug/kg	150
4-Chloro-3-methylphenol	ND	330	ug/kg	100
2-Chloronaphthalene	ND	330	ug/kg	100
2-Chlorophenol	ND	330	ug/kg	150
4-Chlorophenyl phenyl ether	ND	330	ug/kg	90
Chrysene	1300	330	ug/kg	100
Dibenz(a,h) anthracene	ND	330	ug/kg	100
Dibenzofuran	ND	330	ug/kg	90
Di-n-butyl phthalate	ND	330	ug/kg	100
1,2-Dichlorobenzene	ND	330	ug/kg	130
1,3-Dichlorobenzene	ND	330	ug/kg	130
1,4-Dichlorobenzene	ND	330	ug/kg	130
3,3'-Dichlorobenzidine	ND	1600	ug/kg	400
2,4-Dichlorophenol	ND	330	ug/kg	90

(Continued on next page)

000013

HALEY & ALDRICH INC

Client Sample ID: BLDG_1_B15_092701_16

GC/MS Semivolatiles

Lot-Sample #....: E1J020150-001 Work Order #....: ELE2N1AE Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Diethyl phthalate	ND	330	ug/kg	100
2,4-Dimethylphenol	ND	330	ug/kg	100
Dimethyl phthalate	ND	330	ug/kg	80
4,6-Dinitro- 2-methylphenol	ND	1600	ug/kg	300
2,4-Dinitrophenol	ND	1600	ug/kg	500
2,4-Dinitrotoluene	ND	330	ug/kg	100
2,6-Dinitrotoluene	ND	330	ug/kg	90
Di-n-octyl phthalate	ND	330	ug/kg	110
Fluoranthene	1600	330	ug/kg	70
Fluorene	ND	330	ug/kg	90
Hexachlorobenzene	ND	330	ug/kg	80
Hexachlorobutadiene	ND	330	ug/kg	100
Hexachlorocyclopenta- diene	ND	1600	ug/kg	370
Hexachloroethane	ND	330	ug/kg	130
Indeno(1,2,3-cd)pyrene	670	330	ug/kg	100
Isophorone	ND	330	ug/kg	100
2-Methylnaphthalene	ND	330	ug/kg	90
2-Methylphenol	ND	330	ug/kg	80
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	100
Naphthalene	ND	330	ug/kg	90
2-Nitroaniline	ND	1600	ug/kg	300
3-Nitroaniline	ND	1600	ug/kg	350
4-Nitroaniline	ND	1600	ug/kg	200
Nitrobenzene	ND	330	ug/kg	150
2-Nitrophenol	ND	330	ug/kg	100
4-Nitrophenol	ND	1600	ug/kg	400
N-Nitrosodiphenylamine	ND	330	ug/kg	80
N-Nitrosodi-n-propyl- amine	ND	330	ug/kg	90
Pentachlorophenol	ND	1600	ug/kg	420
Phenanthrene	460	330	ug/kg	80
Phenol	ND	330	ug/kg	100
Pyrene	1500	330	ug/kg	120
1,2,4-Trichloro- benzene	ND	330	ug/kg	100
2,4,5-Trichloro- phenol	ND	330	ug/kg	100
2,4,6-Trichloro- phenol	ND	330	ug/kg	70

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000014

HALEY & ALDRICH INC.

Client Sample ID: BLDG_1_B15_092701_16

GC/MS Semivolatiles

Lot-Sample #....: E1J020150-001 Work Order #....: ELE2N1AE Matrix.....: SOLID

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
2-Fluorobiphenyl	82	(40 - 130)
2-Fluorophenol	68	(50 - 115)
2,4,6-Tribromophenol	93	(30 - 115)
Nitrobenzene-d5	79	(45 - 115)
Phenol-d5	76	(50 - 120)
Terphenyl-d14	92	(50 - 140)

NOTE (S) :

J Estimated result. Result is less than RL.

000015

HALEY & ALDRICH INC

Client Sample ID: BLDG_1_B15_092701_16

TOTAL Metals

Lot-Sample #....: E1J020150-001 Date Sampled....: 09/28/01 10:00 Date Received...: 09/28/01 17:45					Matrix.....: SOLID	
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....:	1275306					
Aluminum	24100	20.0	mg/kg	SW846 6010B	10/02/01	ELE2N1AH
		Dilution Factor: 1		Analysis Time...: 16:16	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 1275136	MDL.....: 8.0	
Arsenic	4.6	1.0	mg/kg	SW846 6010B	10/02/01	ELE2N1AJ
		Dilution Factor: 1		Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01		MS Run #.....: 1275136	MDL.....: 0.40	
Antimony	0.77 B	6.0	mg/kg	SW846 6010B	10/02/01	ELE2N1AK
		Dilution Factor: 1		Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01		MS Run #.....: 1275136	MDL.....: 0.60	
Barium	175	2.0	mg/kg	SW846 6010B	10/02/01	ELE2N1AL
		Dilution Factor: 1		Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01		MS Run #.....: 1275136	MDL.....: 0.10	
Cadmium	0.24 B	0.50	mg/kg	SW846 6010B	10/02/01	ELE2N1AM
		Dilution Factor: 1		Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01		MS Run #.....: 1275136	MDL.....: 0.060	
Chromium	30.3	1.0	mg/kg	SW846 6010B	10/02/01	ELE2N1AN
		Dilution Factor: 1		Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01		MS Run #.....: 1275136	MDL.....: 0.10	
Beryllium	0.67	0.50	mg/kg	SW846 6010B	10/02/01	ELE2N1AP
		Dilution Factor: 1		Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01		MS Run #.....: 1275136	MDL.....: 0.050	
Lead	97.1	0.50	mg/kg	SW846 6010B	10/02/01	ELE2N1AQ
		Dilution Factor: 1		Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01		MS Run #.....: 1275136	MDL.....: 0.30	
Selenium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELE2N1AR
		Dilution Factor: 1		Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01		MS Run #.....: 1275136	MDL.....: 0.40	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELE2N1AT
		Dilution Factor: 1		Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01		MS Run #.....: 1275136	MDL.....: 0.10	

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000016

HALEY & ALDRICH INC

Client Sample ID: BLDG_1_B15_092701_16

TOTAL Metals

Lot-Sample #....: E1J020150-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS				
Cobalt	12.9	5.0	mg/kg		SW846 6010B	10/02/01	ELE2N1AU
		Dilution Factor: 1			Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01			MS Run #.....: 1275136	MDL.....: 0.10	
Copper	34.4	2.5	mg/kg		SW846 6010B	10/02/01	ELE2N1AV
		Dilution Factor: 1			Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01			MS Run #.....: 1275136	MDL.....: 0.40	
Molybdenum	0.83 B	4.0	mg/kg		SW846 6010B	10/02/01	ELE2N1AW
		Dilution Factor: 1			Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01			MS Run #.....: 1275136	MDL.....: 0.30	
Nickel	31.9	4.0	mg/kg		SW846 6010B	10/02/01	ELE2N1AX
		Dilution Factor: 1			Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01			MS Run #.....: 1275136	MDL.....: 0.30	
Thallium	ND	1.0	mg/kg		SW846 6010B	10/02/01	ELE2N1A0
		Dilution Factor: 1			Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01			MS Run #.....: 1275136	MDL.....: 0.80	
Vanadium	72.6	5.0	mg/kg		SW846 6010B	10/02/01	ELE2N1A1
		Dilution Factor: 1			Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01			MS Run #.....: 1275136	MDL.....: 0.10	
Zinc	87.7	2.0	mg/kg		SW846 6010B	10/02/01	ELE2N1A2
		Dilution Factor: 1			Analysis Time...: 16:16	Analyst ID.....: 0210886	
		Instrument ID...: M01			MS Run #.....: 1275136	MDL.....: 1.0	
Prep Batch #....: 1275308							
Mercury	0.060 B	0.10	mg/kg		SW846 7471A	10/02/01	ELE2N1A3
		Dilution Factor: 1			Analysis Time...: 13:42	Analyst ID.....: 0000236	
		Instrument ID...: M04			MS Run #.....: 1275137	MDL.....: 0.020	

NOTE (S) :

B Estimated result. Result is less than RL.

000017

QC DATA ASSOCIATION SUMMARY

E1J020150

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	SW846 8015B		1275319	1275157
	SOLID	SW846 8015B		1276276	1276107
	SOLID	SW846 7471A		1275308	1275137
	SOLID	SW846 8082		1275312	1275151
	SOLID	SW846 8260B		1275504	1275263
	SOLID	SW846 8270C		1275325	1275162
	SOLID	SW846 6010B		1275306	1275136

000018

BOE-C6-0180883

**SEVERN
TRENT
SERVICES**

QA/QC

000019

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #....: E1J020150
MB Lot-Sample #: E1J020000-312
Analysis Date...: 10/02/01
Dilution Factor: 1

Work Order #....: ELE8D1AA
Prep Date.....: 10/02/01
Prep Batch #....: 1275312
Analyst ID.....: 018568

Matrix.....: SOLID
Analysis Time...: 14:01
Instrument ID..: G8B

PARAMETER	REPORTING		
	RESULT	LIMIT	UNITS
Aroclor 1016	ND	33	ug/kg
Aroclor 1221	ND	33	ug/kg
Aroclor 1232	ND	33	ug/kg
Aroclor 1242	ND	33	ug/kg
Aroclor 1248	ND	33	ug/kg
Aroclor 1254	ND	33	ug/kg
Aroclor 1260	ND	33	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Decachlorobiphenyl	114	(60 - 140)	
Tetrachloro-m-xylene	64	(60 - 140)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000020

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #....: E1J020150
MB Lot-Sample #: E1J020000-319

Analysis Date...: 10/03/01
Dilution Factor: 1

Work Order #....: ELFAN1AA
Prep Date.....: 10/02/01
Prep Batch #: 1275319

Analyst ID.....: 356074

Matrix.....: SOLID
Analysis Time...: 09:14
Instrument ID...: G02

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
C8-C9	ND	10	mg/kg	SW846 8015B
C10-C11	ND	10	mg/kg	SW846 8015B
C12-C13	ND	10	mg/kg	SW846 8015B
C14-C15	ND	10	mg/kg	SW846 8015B
C16-C17	ND	10	mg/kg	SW846 8015B
C18-C19	ND	10	mg/kg	SW846 8015B
C20-C23	ND	10	mg/kg	SW846 8015B
C24-C27	ND	10	mg/kg	SW846 8015B
C28-C31	ND	10	mg/kg	SW846 8015B
C32-C35	ND	10	mg/kg	SW846 8015B
C36-C39	ND	10	mg/kg	SW846 8015B
C40+	ND	10	mg/kg	SW846 8015B
Total Carbon Chain Range	ND	10	mg/kg	SW846 8015B
SURROGATE	PERCENT	RECOVERY		
		RECOVERY	LIMITS	
Benzo (a) pyrene	95	(60 - 130)		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000021

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: E1J020150 **Work Order #....:** ELFAX1AA **Matrix.....:** SOLID
MB Lot-Sample #: E1J020000-325
Analysis Date...: 10/03/01 **Prep Date.....:** 10/02/01 **Analysis Time..:** 09:06
Dilution Factor: 1 **Prep Batch #....:** 1275325 **Instrument ID..:** MSI
Analyst ID.....: 004648

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acenaphthene	ND	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	330	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Benzoic acid	ND	1600	ug/kg	SW846 8270C
Benzyl alcohol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethyl)- ether	ND	330	ug/kg	SW846 8270C
bis(2-Chloroisopropyl) ether	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270C
Carbazole	ND	330	ug/kg	SW846 8270C
4-Chloroaniline	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270C
Dibenzofuran	ND	330	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270C
Diethyl phthalate	ND	330	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270C
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C

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000022

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: E1J020150

Work Order #....: ELFAX1AA

Matrix.....: SOLID

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	METHOD
4,6-Dinitro- 2-methylphenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrophenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
Hexachlorobenzene	ND	330	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270C
Hexachlorocyclopenta- diene	ND	1600	ug/kg	SW846 8270C
Hexachloroethane	ND	330	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C
Isophorone	ND	330	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270C
2-Methylphenol	ND	330	ug/kg	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	SW846 8270C
Naphthalene	ND	330	ug/kg	SW846 8270C
2-Nitroaniline	ND	1600	ug/kg	SW846 8270C
3-Nitroaniline	ND	1600	ug/kg	SW846 8270C
4-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Nitrobenzene	ND	330	ug/kg	SW846 8270C
2-Nitrophenol	ND	330	ug/kg	SW846 8270C
4-Nitrophenol	ND	1600	ug/kg	SW846 8270C
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosodi-n-propyl- amine	ND	330	ug/kg	SW846 8270C
Pentachlorophenol	ND	1600	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Phenol	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
1,2,4-Trichloro- benzene	ND	330	ug/kg	SW846 8270C
2,4,5-Trichloro- phenol	ND	330	ug/kg	SW846 8270C
2,4,6-Trichloro- phenol	ND	330	ug/kg	SW846 8270C
<hr/>				
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
2-Fluorobiphenyl	78	(40 - 130)		
2-Fluorophenol	67	(50 - 115)		
2,4,6-Tribromophenol	84	(30 - 115)		

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000023

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #....: E1J020150 Work Order #....: ELFAX1AA Matrix.....: SOLID

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Nitrobenzene-d5	74	(45 - 115)		
Phenol-d5	73	(50 - 120)		
Terphenyl-d14	84	(50 - 140)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000024

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: E1J020150 **Work Order #....:** ELF6H1AA **Matrix.....:** SOLID
MB Lot-Sample #: E1J020000-504
Analysis Date...: 10/02/01 **Prep Date.....:** 10/02/01 **Analysis Time..:** 13:10
Dilution Factor: 1 **Prep Batch #....:** 1275504 **Instrument ID..:** MSD
Analyst ID.....: 999998

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Acrolein	ND	100	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	10	ug/kg	SW846 8260B
Acetone	ND	25	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Vinyl acetate	ND	10	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	25	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Tetrahydrofuran	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	25	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	25	ug/kg	SW846 8260B

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000025

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: E1J020150

Work Order #....: ELF6H1AA

Matrix.....: SOLID

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	METHOD
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	10	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
t-Butanol	ND	100	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B
SURROGATE	PERCENT	RECOVERY		
	RECOVERY	LIMITS		
Bromofluorobenzene	98	(70 - 130)		
1,2-Dichloroethane-d4	76	(60 - 140)		
Toluene-d8	91	(70 - 130)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000026

METHOD BLANK REPORT

GC Volatiles

Client Lot #....: E1J020150
MB Lot-Sample #: E1J030000-276
Analysis Date...: 10/02/01
Dilution Factor: 1

Work Order #....: ELG1P1AA
Prep Date.....: 10/02/01
Prep Batch #....: 1276276
Analyst ID.....: 001464

Matrix.....: SOLID
Analysis Time..: 12:22
Instrument ID...: G15

PARAMETER
C6-C8

SURROGATE
a,a,a-Trifluorotoluene (TFT)

	REPORTING		
RESULT	LIMIT	UNITS	METHOD
0.10 J	1.0	mg/kg	SW846 8015B

	PERCENT	RECOVERY
	RECOVERY	LIMITS
	90	(60 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

000027

BOE-C6-0180892

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: E1J020150

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
MB Lot-Sample #: E1J020000-306 Prep Batch #....: 1275306						
Aluminum	ND	20.0	mg/kg	SW846 6010B	10/02/01	ELE6D1AA
		Dilution Factor: 1				
		Analysis Time...: 15:59		Analyst ID.....: 021088	Instrument ID...: M01	
Arsenic	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELE6D1AC
		Dilution Factor: 1				
		Analysis Time...: 15:59		Analyst ID.....: 021088	Instrument ID...: M01	
Antimony	ND	6.0	mg/kg	SW846 6010B	10/02/01	ELE6D1AD
		Dilution Factor: 1				
		Analysis Time...: 15:59		Analyst ID.....: 021088	Instrument ID...: M01	
Barium	ND	2.0	mg/kg	SW846 6010B	10/02/01	ELE6D1AE
		Dilution Factor: 1				
		Analysis Time...: 15:59		Analyst ID.....: 021088	Instrument ID...: M01	
Cadmium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELE6D1AF
		Dilution Factor: 1				
		Analysis Time...: 15:59		Analyst ID.....: 021088	Instrument ID...: M01	
Chromium	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELE6D1AG
		Dilution Factor: 1				
		Analysis Time...: 15:59		Analyst ID.....: 021088	Instrument ID...: M01	
Beryllium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELE6D1AH
		Dilution Factor: 1				
		Analysis Time...: 15:59		Analyst ID.....: 021088	Instrument ID...: M01	
Lead	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELE6D1AJ
		Dilution Factor: 1				
		Analysis Time...: 15:59		Analyst ID.....: 021088	Instrument ID...: M01	
Selenium	ND	0.50	mg/kg	SW846 6010B	10/02/01	ELE6D1AK
		Dilution Factor: 1				
		Analysis Time...: 15:59		Analyst ID.....: 021088	Instrument ID...: M01	
Silver	ND	1.0	mg/kg	SW846 6010B	10/02/01	ELE6D1AL
		Dilution Factor: 1				
		Analysis Time...: 15:59		Analyst ID.....: 021088	Instrument ID...: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B	10/02/01	ELE6D1AM
		Dilution Factor: 1				
		Analysis Time...: 15:59		Analyst ID.....: 021088	Instrument ID...: M01	

(Continued on next page)

000028

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: E1J020150

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			ORDER #
Copper	ND	2.5	mg/kg	SW846 6010B		10/02/01	ELE6D1AN
		Dilution Factor: 1					
		Analysis Time...: 15:59		Analyst ID.....: 021088		Instrument ID...: M01	
Molybdenum	ND	4.0	mg/kg	SW846 6010B		10/02/01	ELE6D1AP
		Dilution Factor: 1					
		Analysis Time...: 15:59		Analyst ID.....: 021088		Instrument ID...: M01	
Nickel	ND	4.0	mg/kg	SW846 6010B		10/02/01	ELE6D1AQ
		Dilution Factor: 1					
		Analysis Time...: 15:59		Analyst ID.....: 021088		Instrument ID...: M01	
Thallium	ND	1.0	mg/kg	SW846 6010B		10/02/01	ELE6D1AR
		Dilution Factor: 1					
		Analysis Time...: 15:59		Analyst ID.....: 021088		Instrument ID...: M01	
Vanadium	ND	5.0	mg/kg	SW846 6010B		10/02/01	ELE6D1AT
		Dilution Factor: 1					
		Analysis Time...: 15:59		Analyst ID.....: 021088		Instrument ID...: M01	
Zinc	ND	2.0	mg/kg	SW846 6010B		10/02/01	ELE6D1AU
		Dilution Factor: 1					
		Analysis Time...: 15:59		Analyst ID.....: 021088		Instrument ID...: M01	

MB Lot-Sample #: E1J020000-308 **Prep Batch #....:** 1275308

Mercury	ND	0.10	mg/kg	SW846 7471A		10/02/01	ELE6G1AA
		Dilution Factor: 1					
		Analysis Time...: 13:38		Analyst ID.....: 000023		Instrument ID...: M04	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000023

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1J020150 Work Order #....: ELE8D1AC Matrix.....: SOLID
LCS Lot-Sample#: E1J020000-312
Prep Date.....: 10/02/01 Analysis Date...: 10/02/01
Prep Batch #:....: 1275312 Analysis Time...: 14:41
Dilution Factor: 1 Instrument ID...: G8B
Analyst ID.....: 018568

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	<u>METHOD</u>
Aroclor 1016	333	335	101	SW846 8082
Aroclor 1260	333	332	99	SW846 8082

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Decachlorobiphenyl	114	(60 - 140)
Tetrachloro-m-xylene	65	(60 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000030

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E1J020150 Work Order #...: ELFAN1AC Matrix.....: SOLID
LCS Lot-Sample#: E1J020000-319
Prep Date.....: 10/02/01 Analysis Date...: 10/03/01
Prep Batch #:...: 1275319 Analysis Time...: 09:53
Dilution Factor: 1 Instrument ID...: G02
Analyst ID.....: 356074

PARAMETER	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
TPH (as Diesel)	250	269	mg/kg	107	SW846 8015B
SURROGATE		PERCENT <u>RECOVERY</u>		RECOVERY <u>LIMITS</u>	
Benzo(a)pyrene		93		(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000031

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: E1J020150 **Work Order #....:** ELFAX1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1J020000-325
Prep Date.....: 10/02/01 **Analysis Date...:** 10/03/01
Prep Batch #....: 1275325 **Analysis Time...:** 09:39
Dilution Factor: 1 **Instrument ID...:** MSI
Analyst ID.....: 004648

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
Acenaphthene	3330	3050	ug/kg	92	SW846 8270C
4-Chloro-3-methylphenol	5000	4500	ug/kg	90	SW846 8270C
2-Chlorophenol	5000	4080	ug/kg	82	SW846 8270C
1,4-Dichlorobenzene	3330	2550	ug/kg	77	SW846 8270C
2,4-Dinitrotoluene	3330	3750	ug/kg	112	SW846 8270C
4-Nitrophenol	5000	4730	ug/kg	95	SW846 8270C
N-Nitrosodi-n-propyl- amine	3330	2900	ug/kg	87	SW846 8270C
Pentachlorophenol	5000	5890	ug/kg	118	SW846 8270C
Phenol	5000	3460	ug/kg	69	SW846 8270C
Pyrene	3330	3260	ug/kg	98	SW846 8270C
1,2,4-Trichloro- benzene	3330	3000	ug/kg	90	SW846 8270C
<hr/>					
<u>SURROGATE</u>		PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>		
2-Fluorobiphenyl		82	(40 - 130)		
2-Fluorophenol		73	(50 - 115)		
2,4,6-Tribromophenol		102	(30 - 115)		
Nitrobenzene-d5		76	(45 - 115)		
Phenol-d5		76	(50 - 120)		
Terphenyl-d14		99	(50 - 140)		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000032

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E1J020150 **Work Order #....:** ELF6H1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1J020000-504
Prep Date.....: 10/02/01 **Analysis Date...:** 10/02/01
Prep Batch #....: 1275504 **Analysis Time...:** 12:40
Dilution Factor: 1 **Instrument ID..:** MSD
Analyst ID.....: 999998

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
1,1-Dichloroethene	50.0	41.5	ug/kg	83	SW846 8260B
Benzene	50.0	45.4	ug/kg	91	SW846 8260B
Trichloroethene	50.0	45.1	ug/kg	90	SW846 8260B
Toluene	50.0	43.1	ug/kg	86	SW846 8260B
Chlorobenzene	50.0	42.5	ug/kg	85	SW846 8260B

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
Bromofluorobenzene	100	(70 - 130)
1,2-Dichloroethane-d4	84	(60 - 140)
Toluene-d8	94	(70 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000033

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: E1J020150 **Work Order #....:** ELG1P1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1J030000-276
Prep Date.....: 10/02/01 **Analysis Date...:** 10/02/01
Prep Batch #....: 1276276 **Analysis Time...:** 13:00
Dilution Factor: 1 **Instrument ID...:** G15
Analyst ID.....: 001464

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	
TPH (as Gasoline)	5.00	5.01	100	SW846 8015B
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
a,a,a-Trifluorotoluene (TFT)		<u>RECOVERY</u>	<u>LIMITS</u>	
		106	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000034

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1J020150

Matrix.....: SOLID

PARAMETER	SPIKE	MEASURED	PERCNT		PREPARATION- ANALYSIS DATE	WORK ORDER #
	AMOUNT	AMOUNT	UNITS	RECVRY		
LCS Lot-Sample#: E1J020000-306 Prep Batch #...: 1275306						
Aluminum	200	172	mg/kg	86	SW846 6010B	10/02/01 ELE6D1AV
			Dilution Factor: 1			
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01
Arsenic	200	180	mg/kg	90	SW846 6010B	10/02/01 ELE6D1AW
			Dilution Factor: 1			
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01
Antimony	50.0	39.7	mg/kg	79	SW846 6010B	10/02/01 ELE6D1AX
			Dilution Factor: 1			
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01
Barium	200	198	mg/kg	99	SW846 6010B	10/02/01 ELE6D1A0
			Dilution Factor: 1			
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01
Cadmium	5.00	4.82	mg/kg	96	SW846 6010B	10/02/01 ELE6D1A1
			Dilution Factor: 1			
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01
Chromium	20.0	19.7	mg/kg	99	SW846 6010B	10/02/01 ELE6D1A2
			Dilution Factor: 1			
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01
Beryllium	5.00	4.84	mg/kg	97	SW846 6010B	10/02/01 ELE6D1A3
			Dilution Factor: 1			
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01
Lead	50.0	44.8	mg/kg	90	SW846 6010B	10/02/01 ELE6D1A4
			Dilution Factor: 1			
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01
Selenium	200	171	mg/kg	86	SW846 6010B	10/02/01 ELE6D1A5
			Dilution Factor: 1			
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01
Silver	5.00	4.60	mg/kg	92	SW846 6010B	10/02/01 ELE6D1A6
			Dilution Factor: 1			
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01

(Continued on next page)

000035

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J020150

Matrix.....: SOLID

PARAMETER	SPIKE	MEASURED	UNITS	PERCNT	METHOD	PREPARATION-	WORK
	AMOUNT	AMOUNT		RECVRY		ANALYSIS DATE	ORDER #
Cobalt	50.0	47.5	mg/kg	95	SW846 6010B	10/02/01	ELE6D1A7
			Dilution Factor: 1				
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01	
Copper	25.0	23.1	mg/kg	92	SW846 6010B	10/02/01	ELE6D1A8
			Dilution Factor: 1				
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01	
Molybdenum	100	94.1	mg/kg	94	SW846 6010B	10/02/01	ELE6D1A9
			Dilution Factor: 1				
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01	
Nickel	50.0	49.5	mg/kg	99	SW846 6010B	10/02/01	ELE6D1CA
			Dilution Factor: 1				
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01	
Thallium	200	173	mg/kg	87	SW846 6010B	10/02/01	ELE6D1CC
			Dilution Factor: 1				
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01	
Vanadium	50.0	48.4	mg/kg	97	SW846 6010B	10/02/01	ELE6D1CD
			Dilution Factor: 1				
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01	
Zinc	50.0	48.2	mg/kg	96	SW846 6010B	10/02/01	ELE6D1CE
			Dilution Factor: 1				
			Analysis Time...: 16:05		Analyst ID.....: 021088	Instrument ID...: M01	
LCS Lot-Sample#: E1J020000-308 Prep Batch #....: 1275308							
Mercury	0.833	0.845	mg/kg	101	SW846 7471A	10/02/01	ELE6G1AC
			Dilution Factor: 1				
			Analysis Time...: 13:40		Analyst ID.....: 000023	Instrument ID...: M04	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000036

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: E1J020150 Work Order #....: ELE8D1AC Matrix.....: SOLID
LCS Lot-Sample#: E1J020000-312
Prep Date.....: 10/02/01 Analysis Date...: 10/02/01
Prep Batch #....: 1275312 Analysis Time...: 14:41
Dilution Factor: 1 Instrument ID...: G8B
Analyst ID.....: 018568

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
Aroclor 1016	101	(65 - 130)	SW846 8082
Aroclor 1260	99	(70 - 130)	SW846 8082

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Decachlorobiphenyl	114	(60 - 140)
Tetrachloro-m-xylene	65	(60 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000037

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: E1J020150 Work Order #....: ELFAN1AC Matrix.....: SOLID
LCS Lot-Sample#: E1J020000-319
Prep Date.....: 10/02/01 Analysis Date...: 10/03/01
Prep Batch #....: 1275319 Analysis Time...: 09:53
Dilution Factor: 1 Instrument ID...: G02
Analyst ID.....: 356074

<u>PARAMETER</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>	<u>METHOD</u>
TPH (as Diesel)	107	(60 - 130)	SW846 8015B
<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>	
Benzo (a) pyrene	93	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000038

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #....: E1J020150 Work Order #....: ELFAX1AC Matrix.....: SOLID
 LCS Lot-Sample#: E1J020000-325
 Prep Date.....: 10/02/01 Analysis Date...: 10/03/01
 Prep Batch #....: 1275325 Analysis Time...: 09:39
 Dilution Factor: 1 Instrument ID...: MSI
 Analyst ID.....: 004648

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Acenaphthene	92	(50 - 125)	SW846 8270C
4-Chloro-3-methylphenol	90	(50 - 110)	SW846 8270C
2-Chlorophenol	82	(50 - 120)	SW846 8270C
1,4-Dichlorobenzene	77	(40 - 115)	SW846 8270C
2,4-Dinitrotoluene	112	(40 - 120)	SW846 8270C
4-Nitrophenol	95	(10 - 120)	SW846 8270C
N-Nitrosodi-n-propyl-amine	87	(40 - 120)	SW846 8270C
Pentachlorophenol	118	(20 - 130)	SW846 8270C
Phenol	69	(40 - 110)	SW846 8270C
Pyrene	98	(50 - 140)	SW846 8270C
1,2,4-Trichloro-benzene	90	(50 - 115)	SW846 8270C
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
2-Fluorobiphenyl	82	(40 - 130)	
2-Fluorophenol	73	(50 - 115)	
2,4,6-Tribromophenol	1.02	(30 - 115)	
Nitrobenzene-d5	76	(45 - 115)	
Phenol-d5	76	(50 - 120)	
Terphenyl-d14	99	(50 - 140)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000039

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1J020150 Work Order #....: ELF6H1AC Matrix.....: SOLID
LCS Lot-Sample#: E1J020000-504
Prep Date.....: 10/02/01 Analysis Date...: 10/02/01
Prep Batch #:....: 1275504 Analysis Time...: 12:40
Dilution Factor: 1 Instrument ID...: MSD
Analyst ID.....: 999998

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
1,1-Dichloroethene	83	(60 - 150)	SW846 8260B
Benzene	91	(70 - 140)	SW846 8260B
Trichloroethene	90	(70 - 130)	SW846 8260B
Toluene	86	(70 - 130)	SW846 8260B
Chlorobenzene	85	(70 - 130)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	100		(70 - 130)
1,2-Dichloroethane-d4	84		(60 - 140)
Toluene-d8	94		(70 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000040

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E1J020150 Work Order #...: ELG1P1AC Matrix.....: SOLID
LCS Lot-Sample#: E1J030000-276
Prep Date.....: 10/02/01 Analysis Date...: 10/02/01
Prep Batch #...: 1276276 Analysis Time...: 13:00
Dilution Factor: 1 Instrument ID..: G15
Analyst ID.....: 001464

<u>PARAMETER</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>	<u>METHOD</u>
TPH (as Gasoline)	100	(80 - 140)	SW846 8015B
<u>SURROGATE</u>		<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
a,a,a-Trifluorotoluene (TFT)		106	(60 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000041

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1J020150

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#:	E1J020000-306	Prep Batch #...:	1275306		
Aluminum	86	(70 - 115)	SW846 6010B	10/02/01	ELE6D1AV
		Dilution Factor: 1			
		Analysis Time...: 16:05	Analyst ID.....: 021088		Instrument ID...: M01
Arsenic	90	(75 - 115)	SW846 6010B	10/02/01	ELE6D1AW
		Dilution Factor: 1			
		Analysis Time...: 16:05	Analyst ID.....: 021088		Instrument ID...: M01
Antimony	79	(75 - 115)	SW846 6010B	10/02/01	ELE6D1AX
		Dilution Factor: 1			
		Analysis Time...: 16:05	Analyst ID.....: 021088		Instrument ID...: M01
Barium	99	(80 - 120)	SW846 6010B	10/02/01	ELE6D1A0
		Dilution Factor: 1			
		Analysis Time...: 16:05	Analyst ID.....: 021088		Instrument ID...: M01
Cadmium	96	(80 - 120)	SW846 6010B	10/02/01	ELE6D1A1
		Dilution Factor: 1			
		Analysis Time...: 16:05	Analyst ID.....: 021088		Instrument ID...: M01
Chromium	99	(85 - 120)	SW846 6010B	10/02/01	ELE6D1A2
		Dilution Factor: 1			
		Analysis Time...: 16:05	Analyst ID.....: 021088		Instrument ID...: M01
Beryllium	97	(80 - 120)	SW846 6010B	10/02/01	ELE6D1A3
		Dilution Factor: 1			
		Analysis Time...: 16:05	Analyst ID.....: 021088		Instrument ID...: M01
Lead	90	(80 - 120)	SW846 6010B	10/02/01	ELE6D1A4
		Dilution Factor: 1			
		Analysis Time...: 16:05	Analyst ID.....: 021088		Instrument ID...: M01
Selenium	86	(70 - 115)	SW846 6010B	10/02/01	ELE6D1A5
		Dilution Factor: 1			
		Analysis Time...: 16:05	Analyst ID.....: 021088		Instrument ID...: M01
Silver	92	(80 - 120)	SW846 6010B	10/02/01	ELE6D1A6
		Dilution Factor: 1			
		Analysis Time...: 16:05	Analyst ID.....: 021088		Instrument ID...: M01

(Continued on next page)

000042

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1J020150

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY		METHOD	PREPARATION-	
		LIMITS	(80 - 120)		ANALYSIS DATE	WORK ORDER #
Cobalt	95			SW846 6010B	10/02/01	ELE6D1A7
		Dilution Factor:	1			
		Analysis Time...:	16:05	Analyst ID.....:	021088	Instrument ID...: M01
Copper	92	(80 - 120)	SW846 6010B		10/02/01	ELE6D1A8
		Dilution Factor:	1			
		Analysis Time...:	16:05	Analyst ID.....:	021088	Instrument ID...: M01
Molybdenum	94	(80 - 120)	SW846 6010B		10/02/01	ELE6D1A9
		Dilution Factor:	1			
		Analysis Time...:	16:05	Analyst ID.....:	021088	Instrument ID...: M01
Nickel	99	(80 - 120)	SW846 6010B		10/02/01	ELE6D1CA
		Dilution Factor:	1			
		Analysis Time...:	16:05	Analyst ID.....:	021088	Instrument ID...: M01
Thallium	87	(75 - 125)	SW846 6010B		10/02/01	ELE6D1CC
		Dilution Factor:	1			
		Analysis Time...:	16:05	Analyst ID.....:	021088	Instrument ID...: M01
Vanadium	97	(80 - 120)	SW846 6010B		10/02/01	ELE6D1CD
		Dilution Factor:	1			
		Analysis Time...:	16:05	Analyst ID.....:	021088	Instrument ID...: M01
Zinc	96	(80 - 120)	SW846 6010B		10/02/01	ELE6D1CE
		Dilution Factor:	1			
		Analysis Time...:	16:05	Analyst ID.....:	021088	Instrument ID...: M01
LCS Lot-Sample#: E1J020000-308 Prep Batch #...: 1275308						
Mercury	101	(85 - 115)	SW846 7471A		10/02/01	ELE6G1AC
		Dilution Factor:	1			
		Analysis Time...:	13:40	Analyst ID.....:	000023	Instrument ID...: M04

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000043

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J020150

Matrix.....: SOLID

Date Sampled...: 09/28/01 10:00 **Date Received..:** 09/28/01 17:45

SAMPLE PARAMETER	SPIKE AMOUNT	MEASURED AMT	PERCNT RECVRY	WORK METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
---------------------	-----------------	-----------------	------------------	----------------	-------------------------------	-----------------

MS Lot-Sample #: E1J020150-001 **Prep Batch #....:** 1275306

Aluminum

24100	200	23300	NC	mg/kg	SW846	6010B	10/02/01	ELE2N1A4
24100	200	25300	NC	mg/kg	SW846	6010B	10/02/01	ELE2N1A5
Dilution Factor: 1								
Analysis Time...: 16:31					Instrument ID...: M01		Analyst ID.....: 021088	
MS Run #.....: 1275136								

Arsenic

4.6	200	178		mg/kg	87	SW846	6010B	10/02/01	ELE2N1A6	
4.6	200	179		mg/kg	87	0.56	SW846	6010B	10/02/01	ELE2N1A7
Dilution Factor: 1										
Analysis Time...: 16:31					Instrument ID...: M01		Analyst ID.....: 021088			
MS Run #.....: 1275136										

Antimony

0.77	50.0	8.69	N	mg/kg	16	SW846	6010B	10/02/01	ELE2N1A8	
0.77	50.0	7.98	N	mg/kg	14	8.5	SW846	6010B	10/02/01	ELE2N1A9
Dilution Factor: 1										
Analysis Time...: 16:31					Instrument ID...: M01		Analyst ID.....: 021088			
MS Run #.....: 1275136										

Barium

175	200	347		mg/kg	86	SW846	6010B	10/02/01	ELE2N1CA	
175	200	362		mg/kg	93	4.2	SW846	6010B	10/02/01	ELE2N1CC
Dilution Factor: 1										
Analysis Time...: 16:31					Instrument ID...: M01		Analyst ID.....: 021088			
MS Run #.....: 1275136										

Cadmium

0.24	5.00	4.46		mg/kg	85	SW846	6010B	10/02/01	ELE2N1CD	
0.24	5.00	4.54		mg/kg	86	1.7	SW846	6010B	10/02/01	ELE2N1CE
Dilution Factor: 1										
Analysis Time...: 16:31					Instrument ID...: M01		Analyst ID.....: 021088			
MS Run #.....: 1275136										

Chromium

30.3	20.0	47.0	N	mg/kg	84	SW846	6010B	10/02/01	ELE2N1CF	
30.3	20.0	49.4		mg/kg	96	5.0	SW846	6010B	10/02/01	ELE2N1CG
Dilution Factor: 1										
Analysis Time...: 16:31					Instrument ID...: M01		Analyst ID.....: 021088			
MS Run #.....: 1275136										

(Continued on next page)

000044

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J020150

Matrix.....: SOLID

Date Sampled...: 09/28/01 10:00 **Date Received...:** 09/28/01 17:45

PARAMETER	SAMPLE	SPIKE	MEASURED	UNITS	PERCNT			METHOD	PREPARATION-	WORK						
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	ANALYSIS DATE		ORDER #							
Beryllium																
	0.67	5.00	5.19	mg/kg	90		SW846	6010B	10/02/01	ELE2N1CH						
	0.67	5.00	5.25	mg/kg	92	1.2	SW846	6010B	10/02/01	ELE2N1CJ						
	Dilution Factor: 1															
	Analysis Time...: 16:31				Instrument ID...: M01			Analyst ID.....: 021088								
	MS Run #.....: 1275136															
Lead																
	97.1	50.0	130	N	mg/kg	67	SW846	6010B	10/02/01	ELE2N1CK						
	97.1	50.0	212	N,*	mg/kg	229	47	SW846	6010B	10/02/01	ELE2N1CL					
	Dilution Factor: 1															
	Analysis Time...: 16:31				Instrument ID...: M01			Analyst ID.....: 021088								
	MS Run #.....: 1275136															
Selenium																
	ND	200	167	mg/kg	84		SW846	6010B	10/02/01	ELE2N1CM						
	ND	200	167	mg/kg	83	0.31	SW846	6010B	10/02/01	ELE2N1CN						
	Dilution Factor: 1															
	Analysis Time...: 16:31				Instrument ID...: M01			Analyst ID.....: 021088								
	MS Run #.....: 1275136															
Silver																
	ND	5.00	4.27	mg/kg	85		SW846	6010B	10/02/01	ELE2N1CP						
	ND	5.00	4.26	mg/kg	85	0.28	SW846	6010B	10/02/01	ELE2N1CQ						
	Dilution Factor: 1															
	Analysis Time...: 16:31				Instrument ID...: M01			Analyst ID.....: 021088								
	MS Run #.....: 1275136															
Cobalt																
	12.9	50.0	56.6	mg/kg	87		SW846	6010B	10/02/01	ELE2N1CR						
	12.9	50.0	58.1	mg/kg	90	2.5	SW846	6010B	10/02/01	ELE2N1CT						
	Dilution Factor: 1															
	Analysis Time...: 16:31				Instrument ID...: M01			Analyst ID.....: 021088								
	MS Run #.....: 1275136															
Copper																
	34.4	25.0	55.6	mg/kg	85		SW846	6010B	10/02/01	ELE2N1CU						
	34.4	25.0	59.0	mg/kg	98	6.0	SW846	6010B	10/02/01	ELE2N1CV						
	Dilution Factor: 1															
	Analysis Time...: 16:31				Instrument ID...: M01			Analyst ID.....: 021088								
	MS Run #.....: 1275136															

(Continued on next page)

000045

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J020150

Matrix.....: SOLID

Date Sampled....: 09/28/01 10:00 **Date Received...:** 09/28/01 17:45

PARAMETER	SAMPLE	SPIKE	MEASURED	UNITS	PERCNT			METHOD	PREPARATION-	WORK										
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	ANALYSIS DATE		ORDER #											
Molybdenum																				
	0.83	100	84.7	mg/kg	84		SW846 6010B		10/02/01	ELE2N1CW										
	0.83	100	85.5	mg/kg	85	0.85	SW846 6010B		10/02/01	ELE2N1CX										
	Dilution Factor: 1																			
	Analysis Time...: 16:31 Instrument ID...: M01																			
	MS Run #.....: 1275136																			
Nickel																				
	31.9	50.0	74.4	mg/kg	85		SW846 6010B		10/02/01	ELE2N1C0										
	31.9	50.0	76.9	mg/kg	90	3.2	SW846 6010B		10/02/01	ELE2N1C1										
	Dilution Factor: 1																			
	Analysis Time...: 16:31 Instrument ID...: M01																			
	MS Run #.....: 1275136																			
Thallium																				
	ND	200	175	mg/kg	87		SW846 6010B		10/02/01	ELE2N1C2										
	ND	200	177	mg/kg	88	1.0	SW846 6010B		10/02/01	ELE2N1C3										
	Dilution Factor: 1																			
	Analysis Time...: 16:31 Instrument ID...: M01																			
	MS Run #.....: 1275136																			
Vanadium																				
	72.6	50.0	114	mg/kg	82		SW846 6010B		10/02/01	ELE2N1C4										
	72.6	50.0	117	mg/kg	89	3.0	SW846 6010B		10/02/01	ELE2N1C5										
	Dilution Factor: 1																			
	Analysis Time...: 16:31 Instrument ID...: M01																			
	MS Run #.....: 1275136																			
Zinc																				
	87.7	50.0	127 N	mg/kg	79		SW846 6010B		10/02/01	ELE2N1C6										
	87.7	50.0	133	mg/kg	92	4.8	SW846 6010B		10/02/01	ELE2N1C7										
	Dilution Factor: 1																			
	Analysis Time...: 16:31 Instrument ID...: M01																			
	MS Run #.....: 1275136																			
MS Lot-Sample #: E1J020150-001 Prep Batch #....: 1275308																				
Mercury																				
	0.060	0.167	0.228	mg/kg	101		SW846 7471A		10/02/01	ELE2N1C8										
	0.060	0.167	0.243	mg/kg	110	6.4	SW846 7471A		10/02/01	ELE2N1C9										
	Dilution Factor: 1																			
	Analysis Time...: 13:44 Instrument ID...: M04																			
	MS Run #.....: 1275137																			

(Continued on next page)

000046

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1J020150

Matrix.....: SOLID

Date Sampled....: 09/28/01 10:00 **Date Received...:** 09/28/01 17:45

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

000047

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1J020150 Work Order #....: ELE2N1DA-MS Matrix.....: SOLID
MS Lot-Sample #: E1J020150-001 ELE2N1DC-MSD
 Date Sampled....: 09/28/01 10:00 Date Received...: 09/28/01 17:45 MS Run #.....: 1275151
 Prep Date.....: 10/02/01 Analysis Date...: 10/02/01
 Prep Batch #....: 1275312 Analysis Time...: 17:20
 Dilution Factor: 1 Analyst ID.....: 018568 Instrument ID...: G8B

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		METHOD
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD	
Aroclor 1016	ND	333	309	ug/kg	93		SW846 8082
	ND	333	322	ug/kg	96	4.1	SW846 8082
Aroclor 1260	64	333	366	ug/kg	91		SW846 8082
	64	333	371	ug/kg	92	1.4	SW846 8082

SURROGATE	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		METHOD
	AMOUNT	AMT	AMOUNT		RECOVERY	LIMITS	
Decachlorobiphenyl	ND	333	309	ug/kg	93	(60 - 140)	SW846 8082
	ND	333	322	ug/kg	96	(60 - 140)	SW846 8082
Tetrachloro-m-xylene	64	333	366	ug/kg	91	(60 - 140)	SW846 8082
	64	333	371	ug/kg	92	(60 - 140)	SW846 8082

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000048

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCENT		METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	
TPH (as Diesel)	54	250	295	mg/kg	96	SW846 8015B
	54	250	270	mq/kg	86	8.8 SW846 8015B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Benzo (a) pyrene	99	(60 - 130)
	97	(60 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000049

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: E1J020150 Work Order #....: ELE2N1DF-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J020150-001 ELE2N1DG-MSD
 Date Sampled...: 09/28/01 10:00 Date Received...: 09/28/01 17:45 MS Run #.....: 1275162
 Prep Date.....: 10/02/01 Analysis Date...: 10/03/01
 Prep Batch #....: 1275325 Analysis Time...: 12:21
 Dilution Factor: 1 Analyst ID.....: 004648 Instrument ID...: MSI

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD	METHOD
Acenaphthene	ND	3330	2570	ug/kg	77		SW846 8270C
	ND	3330	2430	ug/kg	73	5.6	SW846 8270C
4-Chloro-3-methylphenol	ND	5000	3900	ug/kg	78		SW846 8270C
	ND	5000	3920	ug/kg	78	0.51	SW846 8270C
2-Chlorophenol	ND	5000	3520	ug/kg	70		SW846 8270C
	ND	5000	3440	ug/kg	69	2.3	SW846 8270C
1,4-Dichlorobenzene	ND	3330	1870	ug/kg	56		SW846 8270C
	ND	3330	1760	ug/kg	53	5.8	SW846 8270C
2,4-Dinitrotoluene	ND	3330	3290	ug/kg	99		SW846 8270C
	ND	3330	3190	ug/kg	96	3.3	SW846 8270C
4-Nitrophenol	ND	5000	4250	ug/kg	85		SW846 8270C
	ND	5000	3770	ug/kg	75	12	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	3330	2490	ug/kg	75		SW846 8270C
	ND	3330	2480	ug/kg	74	0.28	SW846 8270C
Pentachlorophenol	ND	5000	4350	ug/kg	87		SW846 8270C
	ND	5000	3900	ug/kg	78	11	SW846 8270C
Phenol	ND	5000	3060	ug/kg	61		SW846 8270C
	ND	5000	3050	ug/kg	61	0.09	SW846 8270C
Pyrene	1500	3330	3660	ug/kg	66		SW846 8270C
	1500	3330	3250	ug/kg	54	12	SW846 8270C
1,2,4-Trichlorobenzene	ND	3330	2380	ug/kg	71		SW846 8270C
	ND	3330	2330	ug/kg	70	1.9	SW846 8270C

SURROGATE	PERCENT		RECOVERY
	RECOVERY	LIMITS	
2-Fluorobiphenyl	69	(40 - 130)	
	73	(40 - 130)	
2-Fluorophenol	63	(50 - 115)	
	67	(50 - 115)	
2,4,6-Tribromophenol	78	(30 - 115)	
	85	(30 - 115)	
Nitrobenzene-d5	70	(45 - 115)	
	78	(45 - 115)	
Phenol-d5	69	(50 - 120)	
	73	(50 - 120)	

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000050

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #....: E1J020150 Work Order #....: ELE2N1DF-MS Matrix.....: SOLID
MS Lot-Sample #: E1J020150-001 ELE2N1DG-MSD

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Terphenyl-d14	90	(50 - 140)
	90	(50 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000051

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E1J020150 Work Order #....: ELE2N1DH-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J020150-001 ELE2N1DJ-MSD
 Date Sampled...: 09/28/01 10:00 Date Received...: 09/28/01 17:45 MS Run #.....: 1275263
 Prep Date.....: 10/02/01 Analysis Date...: 10/02/01
 Prep Batch #....: 1275504 Analysis Time...: 14:23
 Dilution Factor: 1 Analyst ID.....: 999998 Instrument ID...: MSD

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCENT			METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	
1,1-Dichloroethene	ND	50.0	42.5	ug/kg	85		SW846 8260B
	ND	50.0	41.5	ug/kg	83	2.4	SW846 8260B
Benzene	ND	50.0	43.2	ug/kg	86		SW846 8260B
	ND	50.0	41.9	ug/kg	84	2.9	SW846 8260B
Trichloroethene	ND	50.0	46.1	ug/kg	92		SW846 8260B
	ND	50.0	45.6	ug/kg	91	1.2	SW846 8260B
Toluene	ND	50.0	41.2	ug/kg	82		SW846 8260B
	ND	50.0	40.0	ug/kg	80	2.8	SW846 8260B
Chlorobenzene	ND	50.0	39.0	ug/kg	78		SW846 8260B
	ND	50.0	38.0	ug/kg	76	2.6	SW846 8260B

SURROGATE	PERCENT		RECOVERY	LIMITS
	RECOVERY			
Bromofluorobenzene	97		(70 - 130)	
1,2-Dichloroethane-d4	94		(70 - 130)	
	82		(60 - 140)	
	81		(60 - 140)	
Toluene-d8	92		(70 - 130)	
	94		(70 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000052

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: E1J020150 Work Order #....: ELE2N1DK-MS Matrix.....: SOLID
MS Lot-Sample #: E1J020150-001 ELE2N1DL-MSD
Date Sampled...: 09/28/01 10:00 Date Received...: 09/28/01 17:45 MS Run #.....: 1276107
Prep Date.....: 10/02/01 Analysis Date...: 10/02/01
Prep Batch #....: 1276276 Analysis Time...: 13:54
Dilution Factor: 1 Analyst ID.....: 001464 Instrument ID..: G15

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCENT			METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECOVERY	RPD	
TPH (as Gasoline)	0.17	5.00	5.80	mg/kg	113		SW846 8015B
	0.17	5.00	6.16	mg/kg	120	6.1	SW846 8015B
<u>SURROGATE</u>			PERCENT			RECOVERY	
a,a,a-Trifluorotoluene (TFT)			RECOVERY			LIMITS	
			125			(60 - 130)	
			125			(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000053

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1J020150

Matrix.....: SOLID

Date Sampled....: 09/28/01 10:00 **Date Received..:** 09/28/01 17:45

PARAMETER	PERCENT	RECOVERY	RPD	RPD LIMITS	METHOD	PREPARATION-	WORK	
	RECOVERY	LIMITS	RPD			ANALYSIS	DATE	ORDER #
MS Lot-Sample #: E1J020150-001 Prep Batch #....: 1275306								
Aluminum	NC	(70 - 115)		SW846 6010B		10/02/01	ELE2N1A4	
	NC	(70 - 115)	(0-25)	SW846 6010B		10/02/01	ELE2N1A5	
		Dilution Factor: 1						
		Analysis Time...: 16:31		Instrument ID...: M01			Analyst ID.....: 021088	
		MS Run #.....: 1275136						
Arsenic	87	(75 - 115)		SW846 6010B		10/02/01	ELE2N1A6	
	87	(75 - 115) 0.56 (0-25)		SW846 6010B		10/02/01	ELE2N1A7	
		Dilution Factor: 1						
		Analysis Time...: 16:31		Instrument ID...: M01			Analyst ID.....: 021088	
		MS Run #.....: 1275136						
Antimony	16 N	(75 - 115)		SW846 6010B		10/02/01	ELE2N1A8	
	14 N	(75 - 115) 8.5 (0-25)		SW846 6010B		10/02/01	ELE2N1A9	
		Dilution Factor: 1						
		Analysis Time...: 16:31		Instrument ID...: M01			Analyst ID.....: 021088	
		MS Run #.....: 1275136						
Barium	86	(80 - 120)		SW846 6010B		10/02/01	ELE2N1CA	
	93	(80 - 120) 4.2 (0-25)		SW846 6010B		10/02/01	ELE2N1CC	
		Dilution Factor: 1						
		Analysis Time...: 16:31		Instrument ID...: M01			Analyst ID.....: 021088	
		MS Run #.....: 1275136						
Cadmium	85	(80 - 120)		SW846 6010B		10/02/01	ELE2N1CD	
	86	(80 - 120) 1.7 (0-25)		SW846 6010B		10/02/01	ELE2N1CE	
		Dilution Factor: 1						
		Analysis Time...: 16:31		Instrument ID...: M01			Analyst ID.....: 021088	
		MS Run #.....: 1275136						
Chromium	84 N	(85 - 120)		SW846 6010B		10/02/01	ELE2N1CF	
	96	(85 - 120) 5.0 (0-25)		SW846 6010B		10/02/01	ELE2N1CG	
		Dilution Factor: 1						
		Analysis Time...: 16:31		Instrument ID...: M01			Analyst ID.....: 021088	
		MS Run #.....: 1275136						
Beryllium	90	(80 - 120)		SW846 6010B		10/02/01	ELE2N1CH	
	92	(80 - 120) 1.2 (0-25)		SW846 6010B		10/02/01	ELE2N1CJ	
		Dilution Factor: 1						
		Analysis Time...: 16:31		Instrument ID...: M01			Analyst ID.....: 021088	
		MS Run #.....: 1275136						

(Continued on next page)

000054

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1J020150

Matrix.....: SOLID

Date Sampled....: 09/28/01 10:00 **Date Received...:** 09/28/01 17:45

PARAMETER	PERCENT RECOVERY	RECOVERY	RPD	METHOD	PREPARATION-	WORK ORDER #
		LIMITS	RPD		ANALYSIS DATE	
Lead	67 N	(80 - 120)		SW846 6010B	10/02/01	ELE2N1CK
	229 N,*	(80 - 120) 47	(0-25)	SW846 6010B	10/02/01	ELE2N1CL
		Dilution Factor: 1				
		Analysis Time...: 16:31		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275136				
Selenium	84	(70 - 115)		SW846 6010B	10/02/01	ELE2N1CM
	83	(70 - 115) 0.31	(0-25)	SW846 6010B	10/02/01	ELE2N1CN
		Dilution Factor: 1				
		Analysis Time...: 16:31		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275136				
Silver	85	(80 - 120)		SW846 6010B	10/02/01	ELE2N1CP
	85	(80 - 120) 0.28	(0-25)	SW846 6010B	10/02/01	ELE2N1CQ
		Dilution Factor: 1				
		Analysis Time...: 16:31		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275136				
Cobalt	87	(80 - 120)		SW846 6010B	10/02/01	ELE2N1CR
	90	(80 - 120) 2.5	(0-25)	SW846 6010B	10/02/01	ELE2N1CT
		Dilution Factor: 1				
		Analysis Time...: 16:31		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275136				
Copper	85	(80 - 120)		SW846 6010B	10/02/01	ELE2N1CU
	98	(80 - 120) 6.0	(0-25)	SW846 6010B	10/02/01	ELE2N1CV
		Dilution Factor: 1				
		Analysis Time...: 16:31		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275136				
Molybdenum	84	(80 - 120)		SW846 6010B	10/02/01	ELE2N1CW
	85	(80 - 120) 0.85	(0-25)	SW846 6010B	10/02/01	ELE2N1CX
		Dilution Factor: 1				
		Analysis Time...: 16:31		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275136				
Nickel	85	(80 - 120)		SW846 6010B	10/02/01	ELE2N1C0
	90	(80 - 120) 3.2	(0-25)	SW846 6010B	10/02/01	ELE2N1C1
		Dilution Factor: 1				
		Analysis Time...: 16:31		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275136				

(Continued on next page)

000055

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1J020150

Matrix.....: SOLID

Date Sampled....: 09/28/01 10:00 **Date Received...:** 09/28/01 17:45

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #
Thallium	87	(75 - 125)		SW846 6010B	10/02/01	ELE2N1C2
	88	(75 - 125)	1.0 (0-25)	SW846 6010B	10/02/01	ELE2N1C3
		Dilution Factor: 1				
		Analysis Time...: 16:31		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275136				
Vanadium	82	(80 - 120)		SW846 6010B	10/02/01	ELE2N1C4
	89	(80 - 120)	3.0 (0-25)	SW846 6010B	10/02/01	ELE2N1C5
		Dilution Factor: 1				
		Analysis Time...: 16:31		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275136				
Zinc	79 N	(80 - 120)		SW846 6010B	10/02/01	ELE2N1C6
	92	(80 - 120)	4.8 (0-25)	SW846 6010B	10/02/01	ELE2N1C7
		Dilution Factor: 1				
		Analysis Time...: 16:31		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1275136				
MS Lot-Sample #: E1J020150-001 Prep Batch #....: 1275308						
Mercury	101	(80 - 120)		SW846 7471A	10/02/01	ELE2N1C8
	110	(80 - 120)	6.4 (0-20)	SW846 7471A	10/02/01	ELE2N1C9
		Dilution Factor: 1				
		Analysis Time...: 13:44		Instrument ID...: M04		Analyst ID.....: 000023
		MS Run #.....: 1275137				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

000056

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Aroclor 1016	93	(65 - 130)			SW846 8082
	96	(65 - 130)	4.1	(0-30)	SW846 8082
Aroclor 1260	91	(70 - 130)			SW846 8082
	92	(70 - 130)	1.4	(0-30)	SW846 8082

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
Decachlorobiphenyl	134	(60 - 140)
	134	(60 - 140)
Tetrachloro-m-xylene	94	(60 - 140)
	97	(60 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: E1J020150 **Work Order #....:** ELE2N1DD-MS **Matrix.....:** SOLID
MS Lot-Sample #: E1J020150-001 **ELE2N1DE-MSD**
Date Sampled....: 09/28/01 10:00 **Date Received...:** 09/28/01 17:45 **MS Run #.....:** 1275157
Prep Date.....: 10/02/01 **Analysis Date...:** 10/03/01
Prep Batch #....: 1275319 **Analysis Time...:** 11:10
Dilution Factor: 1 **Analyst ID.....:** 356074 **Instrument ID...:** G02

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>			
TPH (as Diesel)	96	(60 - 130)			SW846 8015B
	86	(60 - 130)	8.8	(0-35)	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Benzo (a) pyrene	99	(60 - 130)
	97	(60 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000058

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Acenaphthene	77	(50 - 125)			SW846 8270C
	73	(50 - 125)	5.6	(0-35)	SW846 8270C
4-Chloro-3-methylphenol	78	(50 - 110)			SW846 8270C
	78	(50 - 110)	0.51	(0-35)	SW846 8270C
2-Chlorophenol	70	(50 - 120)			SW846 8270C
	69	(50 - 120)	2.3	(0-35)	SW846 8270C
1,4-Dichlorobenzene	56	(40 - 115)			SW846 8270C
	53	(40 - 115)	5.8	(0-35)	SW846 8270C
2,4-Dinitrotoluene	99	(40 - 120)			SW846 8270C
	96	(40 - 120)	3.3	(0-35)	SW846 8270C
4-Nitrophenol	85	(10 - 120)			SW846 8270C
	75	(10 - 120)	12	(0-35)	SW846 8270C
N-Nitrosodi-n-propyl- amine	75	(40 - 120)			SW846 8270C
	74	(40 - 120)	0.28	(0-35)	SW846 8270C
Pentachlorophenol	87	(20 - 130)			SW846 8270C
	78	(20 - 130)	11	(0-35)	SW846 8270C
Phenol	61	(40 - 110)			SW846 8270C
	61	(40 - 110)	0.09	(0-35)	SW846 8270C
Pyrene	66	(50 - 140)			SW846 8270C
	54	(50 - 140)	12	(0-35)	SW846 8270C
1,2,4-Trichloro- benzene	71	(50 - 115)			SW846 8270C
	70	(50 - 115)	1.9	(0-35)	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
2-Fluorobiphenyl	69	(40 - 130)
	73	(40 - 130)
2-Fluorophenol	63	(50 - 115)
	67	(50 - 115)
2,4,6-Tribromophenol	78	(30 - 115)
	85	(30 - 115)
Nitrobenzene-d5	70	(45 - 115)
	78	(45 - 115)
Phenol-d5	69	(50 - 120)
	73	(50 - 120)

(Continued on next page)

000059

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #....: E1J020150 Work Order #....: ELE2N1DF-MS Matrix.....: SOLID
MS Lot-Sample #: E1J020150-001 ELE2N1DG-MSD

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Terphenyl-d14	90	(50 - 140)
	90	(50 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000060

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	85	(60 - 150)			SW846 8260B
	83	(60 - 150)	2.4	(0-30)	SW846 8260B
Benzene	86	(70 - 140)			SW846 8260B
	84	(70 - 140)	2.9	(0-30)	SW846 8260B
Trichloroethene	92	(70 - 130)			SW846 8260B
	91	(70 - 130)	1.2	(0-30)	SW846 8260B
Toluene	82	(70 - 130)			SW846 8260B
	80	(70 - 130)	2.8	(0-30)	SW846 8260B
Chlorobenzene	78	(70 - 130)			SW846 8260B
	76	(70 - 130)	2.6	(0-30)	SW846 8260B

<u>SURROGATE</u>	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(70 - 130)
	94	(70 - 130)
1,2-Dichloroethane-d4	82	(60 - 140)
	81	(60 - 140)
Toluene-d8	92	(70 - 130)
	94	(70 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000061

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: E1J020150 **Work Order #....:** ELE2N1DK-MS **Matrix.....:** SOLID
MS Lot-Sample #: E1J020150-001 **ELE2N1DL-MSD**
Date Sampled....: 09/28/01 10:00 **Date Received...:** 09/28/01 17:45 **MS Run #.....:** 1276107
Prep Date.....: 10/02/01 **Analysis Date...:** 10/02/01
Prep Batch #....: 1276276 **Analysis Time...:** 13:54
Dilution Factor: 1 **Analyst ID.....:** 001464 **Instrument ID...:** G15

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
TPH (as Gasoline)	1.13	(80 - 140)			SW846 8015B
	120	(80 - 140)	6.1	(0-40)	SW846 8015B
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>			
a,a,a-Trifluorotoluene (TFT)	125			(60 - 130)	
	125			(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000062

BOE-C6-0180927

SEVERN
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SERVICES

Subcontract Reports

000063



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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY REPORT

Prepared For: STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705

Attention: Diane Suzuki
Project: E1J020150

Sampled: 09/28/01
Received: 10/02/01
Reported: 10/05/01

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Del Mar Analytical and its client. This entire report was reviewed and approved for release.*

CA ELAP Certificate #1169
AZ DHS License #AZ0062

A handwritten signature in black ink, appearing to read "Clinton J. Kiser".

Del Mar Analytical, Colton
Clinton J. Kiser
Object Manager

000064

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CKJ0026 <Page 1 of 5>

BOE-C6-0180929



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TL Los Angeles
721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1J020150

Report Number: CKJ0026

Sampled:09/28/01

Received:10/02/01

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Method	Batch	Reporting	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			Limit			ug/kg	ug/kg	
Sample ID: CKJ0026-01 (BLDG_1_B_15_092801_16' - Soil)								
Acenaphthene	EPA 8310	C1J0308	5000	ND	100	10/3/01	10/4/01	
Acenaphthylene	EPA 8310	C1J0308	20000	ND	100	10/3/01	10/4/01	
Anthracene	EPA 8310	C1J0308	200	240	100	10/3/01	10/4/01	
Benzo(a)anthracene	EPA 8310	C1J0308	200	1600	100	10/3/01	10/4/01	
Benzo(a)pyrene	EPA 8310	C1J0308	200	2200	100	10/3/01	10/4/01	
Benzo(b)fluoranthene	EPA 8310	C1J0308	500	2100	100	10/3/01	10/4/01	
Benzo(g,h,i)perylene	EPA 8310	C1J0308	500	1400	100	10/3/01	10/4/01	
Benzo(k)fluoranthene	EPA 8310	C1J0308	200	960	100	10/3/01	10/4/01	
Brysene	EPA 8310	C1J0308	500	1600	100	10/3/01	10/4/01	
Benzo(a,h)anthracene	EPA 8310	C1J0308	500	ND	100	10/3/01	10/4/01	
Fluoranthene	EPA 8310	C1J0308	500	ND	100	10/3/01	10/4/01	
Torene	EPA 8310	C1J0308	500	ND	100	10/3/01	10/4/01	
Benzo(1,2,3-cd)pyrene	EPA 8310	C1J0308	500	1300	100	10/3/01	10/4/01	
Naphthalene	EPA 8310	C1J0308	4000	ND	100	10/3/01	10/4/01	
Phenanthrene	EPA 8310	C1J0308	500	960	100	10/3/01	10/4/01	
Resene	EPA 8310	C1J0308	500	2400	100	10/3/01	10/4/01	
Surrogate: 2-Methylanthracene (35-115%)				621 %				Z3

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

000065

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CKJ0026 <Page 2 of 5>

BOE-C6-0180930



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STL Los Angeles
 1721 S. Grand Avenue
 Santa Ana, CA 92705
 Attention: Diane Suzuki

Client Project ID: E1J020150

Report Number: CKJ0026

Sampled:09/28/01

Received:10/02/01

METHOD BLANK/QC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	Data Limit Qualifiers
---------	--------	-----------------	-------	-------------	---------------	-----------	-------------	---------	-----------------------

Batch: C1J0308 Extracted: 10/03/01

Blank Analyzed: 10/04/01 (C1J0308-BLK1)

benaphthene	ND	50	ug/kg						
benaphthylene	ND	200	ug/kg						
thracene	ND	2.0	ug/kg						
nzo(a)anthracene	ND	2.0	ug/kg						
nzo(a)pyrene	ND	2.0	ug/kg						
nzo(b)fluoranthene	ND	5.0	ug/kg						
nzo(g,h,i)perylene	ND	5.0	ug/kg						
nzo(k)fluoranthene	ND	2.0	ug/kg						
rysene	ND	5.0	ug/kg						
benzo(a,h)anthracene	ND	5.0	ug/kg						
oranthene	ND	5.0	ug/kg						
orene	ND	5.0	ug/kg						
leno(1,2,3-cd)pyrene	ND	5.0	ug/kg						
phthalene	ND	40	ug/kg						
enanthrene	ND	5.0	ug/kg						
rene	ND	5.0	ug/kg						
rogate: 2-Methylanthracene	4.99		ug/kg	8.00		62.4	35-115		

BS Analyzed: 10/04/01 (C1J0308-BS1)

enaphthene	120	50	ug/kg	160		75.0	45-115		
enaphthylene	314	200	ug/kg	320		98.1	50-115		
thracene	11.1	2.0	ug/kg	16.0		69.4	55-115		
nzo(a)anthracene	13.9	2.0	ug/kg	16.0		86.9	65-115		
nzo(a)pyrene	9.66	2.0	ug/kg	16.0		60.4	55-115		
nzo(b)fluoranthene	27.1	5.0	ug/kg	32.0		84.7	65-115		
nzo(g,h,i)perylene	25.2	5.0	ug/kg	32.0		78.8	60-115		
nzo(k)fluoranthene	13.9	2.0	ug/kg	16.0		86.9	65-115		
rysene	13.8	5.0	ug/kg	16.0		86.2	65-115		
benzo(a,h)anthracene	26.8	5.0	ug/kg	32.0		83.8	60-115		
oranthene	27.6	5.0	ug/kg	32.0		86.2	65-115		
orene	25.5	5.0	ug/kg	32.0		79.7	55-115		
leno(1,2,3-cd)pyrene	12.6	5.0	ug/kg	16.0		78.8	55-115		
phthalene	148	40	ug/kg	160		92.5	45-115		
enanthrene	13.3	5.0	ug/kg	16.0		83.1	55-120		
rene	13.4	5.0	ug/kg	16.0		83.8	55-115		

Del Mar Analytical, Colton
 J. Kiser
 Project Manager

000066

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CKJ0026 <Page 3 of 5>

BOE-C6-0180931



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-9596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

TL Los Angeles
721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1J020150

Report Number: CKJ0026

Sampled:09/28/01

Received:10/02/01

METHOD:BLANK/QC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	Data Limit	Data Qualifiers
Batch: C1J0308 Extracted: 10/03/01										
CS Analyzed: 10/04/01 (C1J0308-BS1) Surrogate: 2-Methylnanthracene	5.46		ug/kg	8.00		68.2	35-115			

Mar Analytical, Colton
Linton J. Kiser
Object Manager

000067

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CKJ0026 <Page 4 of 5>

BOE-C6-0180932



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1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-9596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1J020150

Report Number: CKJ0026

Sampled:09/28/01

Received:10/02/01

DATA QUALIFIERS AND DEFINITIONS

- D3** The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- NR** Not reported.
- RPD** Relative Percent Difference

Del Mar Analytical, Colton
John J. Kiser
Project Manager

000068

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CKJ0026 <Page 5 of 5>

BOE-C6-0180933

SEVERN
TRENT
SERVICES

October 30, 2001

STL LOT NUMBER: E1J240297
NELAP Certification Number: 01118CA
PO/CONTRACT: 05220-SEV001-00-G72

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

Tel: 714 258 8610
Fax: 714 258 0921
www.stlinc.com

Mehmet Pehlivan
Tait Environmental
701 Park Center Drive
Santa Ana, CA 92705

Dear Mr. Pehlivan,

This report contains the analytical results for the four samples received under chain of custody by STL Los Angeles on October 24, 2001. These samples are associated with your BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures met method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report. The PAHs by 8310 analysis was performed by Del Mar Analytical. See attached report for any related anomaly.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,



Diane Suzuki
Project Manager
CC: Project File

Page 1 of 000054 total pages in this report.

000001

STL Los Angeles is a part of Severn Trent Laboratories, Inc.



SEVERN
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SERVICES

Analytical Report

000004

EXECUTIVE SUMMARY - Detection Highlights

E1J230204

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SP_24_102301_1 10/23/01 09:00 001				
C20-C23	5.6 J	10	mg/kg	SW846 8015B
C24-C27	12	10	mg/kg	SW846 8015B
C28-C31	11	10	mg/kg	SW846 8015B
C32-C35	5.9 J	10	mg/kg	SW846 8015B
Total Carbon Chain Range	39	10	mg/kg	SW846 8015B
Aroclor 1254	23 J	33	ug/kg	SW846 8082
Aroclor 1260	93	33	ug/kg	SW846 8082
Arsenic	4.6	1.0	mg/kg	SW846 6010B
Lead	10.2	0.50	mg/kg	SW846 6010B
SP_24_102301_2 10/23/01 09:05 002				
C20-C23	7.3 J	10	mg/kg	SW846 8015B
C24-C27	17	10	mg/kg	SW846 8015B
C28-C31	13	10	mg/kg	SW846 8015B
C32-C35	7.6 J	10	mg/kg	SW846 8015B
Total Carbon Chain Range	51	10	mg/kg	SW846 8015B
Aroclor 1254	21 J	33	ug/kg	SW846 8082
Aroclor 1260	36	33	ug/kg	SW846 8082
Arsenic	7.0	1.0	mg/kg	SW846 6010B
Lead	12.1	0.50	mg/kg	SW846 6010B

000005

METHODS SUMMARY

E1J230204

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Extractable Petroleum Hydrocarbons	SW846 8015B	SANA AUTO-SHAKE
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
PCBs by SW-846 8082	SW846 8082	SW846 3550
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846 5030

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

000006

SAMPLE SUMMARY

E10230204

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
EMLLV	001	SP_24_102301_1	10/23/01	09:00
EMLMJ	002	SP_24_102301_2	10/23/01	09:05

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

000007

WALEY & ALDRICH INC

Client Sample ID: SP_24_102301_1

GC Semivolatiles

Lot-Sample #....: E1J230204-001 Work Order #....: EMLLV1AD Matrix.....: SOLID
 Date Sampled...: 10/23/01 09:00 Date Received...: 10/23/01 12:25 MS Run #.....: 1296227
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #...: 1296453 Analysis Time...: 21:54
 Dilution Factor: 1
 Analyst ID.....: 356074 Instrument ID...: G02
 Method.....: SW846 8015B

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	MDL
C8-C9	ND	10	mg/kg	5.0
C10-C11	ND	10	mg/kg	5.0
C12-C13	ND	10	mg/kg	5.0
C14-C15	ND	10	mg/kg	5.0
C16-C17	ND	10	mg/kg	5.0
C18-C19	ND	10	mg/kg	5.0
C20-C23	5.6 J	10	mg/kg	5.0
C24-C27	12	10	mg/kg	5.0
C28-C31	11	10	mg/kg	5.0
C32-C35	5.9 J	10	mg/kg	5.0
C36-C39	ND	10	mg/kg	5.0
C40+	ND	10	mg/kg	5.0
Total Carbon Chain Range	39	10	mg/kg	5.0
SURROGATE	PERCENT		RECOVERY	
	RECOVERY		LIMITS	
Benzo(a)pyrene	67		(60 - 130)	

NOTE (S) :

J Estimated result. Result is less than RL.

000008

HALEY & ALDRICH INC

Client Sample ID: SP_24_102301_1

GC Volatiles

Lot-Sample #....: E1J230204-001 Work Order #....: EMLLV1AE Matrix.....: SOLID
Date Sampled...: 10/23/01 09:00 Date Received...: 10/23/01 12:25 MS Run #.....: 1296215
Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
Prep Batch #....: 1296437 Analysis Time...: 14:24
Dilution Factor: 1
Analyst ID.....: 001464 Instrument ID...: G15
Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
C6-C8	ND	1.0	mg/kg	0.10
SURROGATE	PERCENT	RECOVERY	LIMITS	
a,a,a-Trifluorotoluene (TFT)	81	(60 - 130)		

000009

HALEY & ALDRICH INC

Client Sample ID: SP_24_102301_1

GC Semivolatiles

Lot-Sample #....: E1J230204-001 Work Order #....: EMLLV1AH Matrix.....: SOLID
 Date Sampled...: 10/23/01 09:00 Date Received...: 10/23/01 12:25 MS Run #.....: 1296246
 Prep Date.....: 10/23/01 Analysis Date...: 10/24/01
 Prep Batch #....: 1296478 Analysis Time...: 09:03
 Dilution Factor: 1
 Analyst ID.....: 018568 Instrument ID...: G8B
 Method.....: SW846 8082

<u>PARAMETER</u>	REPORTING			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Aroclor 1016	ND	33	ug/kg	10
Aroclor 1221	ND	33	ug/kg	10
Aroclor 1232	ND	33	ug/kg	10
Aroclor 1242	ND	33	ug/kg	10
Aroclor 1248	ND	33	ug/kg	10
Aroclor 1254	23 J	33	ug/kg	10
Aroclor 1260	93	33	ug/kg	10

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Decachlorobiphenyl	116	(60 - 140)
Tetrachloro-m-xylene	102	(60 - 140)

NOTE (S) :

J Estimated result. Result is less than RL.

ARI254 and ARI260 calculated by non-common peaks; ARI260 is weathered.

000010

HALEY & ALDRICH INC

Client Sample ID: SP_24_102301_1

GC/MS Volatiles

Lot-Sample #....: E1J230204-001 Work Order #....: EMLLV1AF Matrix.....: SOLID
 Date Sampled....: 10/23/01 09:00 Date Received...: 10/23/01 12:25 MS Run #.....: 1297096
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #....: 1297233 Analysis Time...: 16:33
 Dilution Factor: 1
 Analyst ID.....: 999998 Instrument ID...: MSD
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	2.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	5.0
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	2.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	10
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

000011

HALEY & ALDRICH INC

Client Sample ID: SP_24_102301_1

GC/MS Volatiles

Lot-Sample #....: E1J230204-001 Work Order #....: EMLLV1AF Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	5.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dihromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>	
Bromofluorobenzene	96	(70 - 130)		
1,2-Dichloroethane-d4	79	(60 - 140)		
Toluene-d8	83	(70 - 130)		

000012

HALEY & ALDRICH INC

Client Sample ID: SP_24_102301_2

GC Semivolatiles

Lot-Sample #....: E1J230204-002 Work Order #....: EMLMJ1AD Matrix.....: SOLID
 Date Sampled...: 10/23/01 09:05 Date Received...: 10/23/01 12:25 MS Run #.....: 1296227
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #....: 1296453 Analysis Time...: 22:33
 Dilution Factor: 1
 Analyst ID.....: 356074 Instrument ID...: G02
 Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
C8-C9	ND	10	mg/kg	5.0
C10-C11	ND	10	mg/kg	5.0
C12-C13	ND	10	mg/kg	5.0
C14-C15	ND	10	mg/kg	5.0
C16-C17	ND	10	mg/kg	5.0
C18-C19	ND	10	mg/kg	5.0
C20-C23	7.3 J	10	mg/kg	5.0
C24-C27	17	10	mg/kg	5.0
C28-C31	13	10	mg/kg	5.0
C32-C35	7.6 J	10	mg/kg	5.0
C36-C39	ND	10	mg/kg	5.0
C40+	ND	10	mg/kg	5.0
Total Carbon Chain Range	51	10	mg/kg	5.0
<u>SURROGATE</u>		PERCENT RECOVERY	RECOVERY LIMITS	
Benzo (a) pyrene		78	(60 - 130)	

NOTE (S) :

J Estimated result. Result is less than RL.

000013

HALEY & ALDRICH INC

Client Sample ID: SP_24_102301_2

GC Volatiles

Lot-Sample #...: E1J230204-002 Work Order #...: EMLMJ1AE Matrix.....: SOLID
Date Sampled...: 10/23/01 09:05 Date Received...: 10/23/01 12:25 MS Run #.....: 1296215
Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
Prep Batch #...: 1296437 Analysis Time...: 14:50
Dilution Factor: 1
Analyst ID.....: 001464 Instrument ID...: G15
Method.....: SW846 8015B

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	MDL
C6-C8	ND	1.0	mg/kg	0.10
SURROGATE	PERCENT RECOVERY			
	RECOVERY	LIMITS	(60 - 130)	
a,a,a-Trifluorotoluene (TFT)	82			

000014

HALEY & ALDRICH INC

Client Sample ID: SP_24_102301_2

GC Semivolatiles

Lot-Sample #....: E1J230204-002 Work Order #....: EMLMJ1AH Matrix.....: SOLID
 Date Sampled...: 10/23/01 09:05 Date Received...: 10/23/01 12:25 MS Run #....: 1296246
 Prep Date.....: 10/23/01 Analysis Date...: 10/24/01
 Prep Batch #....: 1296478 Analysis Time...: 09:42
 Dilution Factor: 1
 Analyst ID.....: 018568 Instrument ID...: G8B
 Method.....: SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Aroclor 1016	ND	33	ug/kg	10
Aroclor 1221	ND	33	ug/kg	10
Aroclor 1232	ND	33	ug/kg	10
Aroclor 1242	ND	33	ug/kg	10
Aroclor 1248	ND	33	ug/kg	10
Aroclor 1254	21 J	33	ug/kg	10
Aroclor 1260	36	33	ug/kg	10

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	RECOVERY	
		<u>LIMITS</u>	
Decachlorobiphenyl	100	(60 - 140)	
Tetrachloro-m-xylene	87	(60 - 140)	

NOTE (S) :

J Estimated result. Result is less than RL.

ARI254 and AR1260 calculated by non-common peaks; AR1260 is weathered.

000015

HALEY & ALDRICH INC

Client Sample ID: SP_24_102301_2

GC/MS Volatiles

Lot-Sample #....: E1J230204-002 Work Order #....: EMLMJ1AF Matrix.....: SOLID
 Date Sampled....: 10/23/01 09:05 Date Received...: 10/23/01 12:25 MS Run #.....: 1297096
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #....: 1297233 Analysis Time...: 17:04
 Dilution Factor: 1
 Analyst ID.....: 999998 Instrument ID.: MSD
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	2.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	5.0
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	2.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	ND	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	10
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

000016

HALEY & ALDRICH INC

Client Sample ID: SP_24_102301_2

GC/MS Volatiles

Lot-Sample #....: E1J230204-002 Work Order #....: EMLMJ1AF Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	5.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0
<u>SURROGATE</u>		<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
Bromofluorobenzene	95		(70 - 130)	
1,2-Dichloroethane-d4	78		(60 - 140)	
Toluene-d8	83		(70 - 130)	

000017

HALEY & ALDRICH INC

Client Sample ID: SP_24_102301_1

TOTAL Metals

Lot-Sample #...: E1J230204-001 Matrix.....: SOLID
 Date Sampled...: 10/23/01 09:00 Date Received..: 10/23/01 12:25

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>		<u>ANALYSIS DATE</u>	<u>ORDER #</u>
Prep Batch #...: 1296371						
Arsenic	4.6	1.0	mg/kg	SW846 6010B	10/23/01	EMLLV1AA
		Dilution Factor: 1		Analysis Time...: 17:32	Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 1296185	MDL.....: 0.40	
Lead	10.2	0.50	mg/kg	SW846 6010B	10/23/01	EMLLV1AC
		Dilution Factor: 1		Analysis Time...: 17:32	Analyst ID.....: 0210885	
		Instrument ID...: M01		MS Run #.....: 1296185	MDL.....: 0.30	

000018

HALEY & ALDRICH INC

Client Sample ID: SP_24_102301_2

TOTAL Metals

Lot-Sample #....: E1J230204-002

Matrix.....: SOLID

Date Sampled....: 10/23/01 09:05 Date Received..: 10/23/01 12:25

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING			<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>	<u>ORDER #</u>
		<u>LIMIT</u>	<u>UNITS</u>	<u>ANALYSIS DATE</u>				
Prep Batch #....: 1296371								
Arsenic	7.0	1.0	mg/kg	SW846 6010B		10/23/01	EMLMJ1AA	
		Dilution Factor: 1		Analysis Time...: 17:40			Analyst ID.....: 021088	
		Instrument ID...: M01		MS Run #.....: 1296185			MDL.....: 0.40	
Lead	12.1	0.50	mg/kg	SW846 6010B		10/23/01	EMLMJ1AC	
		Dilution Factor: 1		Analysis Time...: 17:40			Analyst ID.....: 0210885	
		Instrument ID...: M01		MS Run #.....: 1296185			MDL.....: 0.30	

000019



QA/QC

000020

QC DATA ASSOCIATION SUMMARY

E1J230204

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	SW846 8015B		1296453	1296227
	SOLID	SW846 8015B		1296437	1296215
	SOLID	SW846 8082		1296478	1296246
	SOLID	SW846 8260B		1297233	1297096
	SOLID	SW846 6010B		1296371	1296185
002	SOLID	SW846 8015B		1296453	1296227
	SOLID	SW846 8015B		1296437	1296215
	SOLID	SW846 8082		1296478	1296246
	SOLID	SW846 8260B		1297233	1297096
	SOLID	SW846 6010B		1296371	1296185

000021

METHOD BLANK REPORT

GC Volatiles

Client Lot #....: E1J230204 Work Order #....: EMLOA1AA Matrix.....: SOLID
MB Lot-Sample #: E1J230000-437 Prep Date.....: 10/23/01 Analysis Time...: 13:55
Analysis Date...: 10/23/01 Prep Batch #: 1296437 Instrument ID...: G15
Dilution Factor: 1 Analyst ID.....: 001464

PARAMETER	REPORTING		
	RESULT	LIMIT	UNITS
C6-C8	ND	1.0	mg/kg
			METHOD
SURROGATE	PERCENT	RECOVERY	
a,a,a-Trifluorotoluene (TFT)	RECOVERY	LIMITS	
	89	(60 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000022

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E1J230204 Work Order #...: EML131AA Matrix.....: SOLID
 MB Lot-Sample #: E1J230000-453
 Analysis Date..: 10/23/01 Prep Date.....: 10/23/01 Analysis Time.: 20:36
 Dilution Factor: 1 Prep Batch #: 1296453 Instrument ID.: G02
 Analyst ID....: 356074

<u>PARAMETER</u>	<u>REPORTING</u>			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
C8-C9	ND	10	mg/kg	SW846 8015B
C10-C11	ND	10	mg/kg	SW846 8015B
C12-C13	ND	10	mg/kg	SW846 8015B
C14-C15	ND	10	mg/kg	SW846 8015B
C16-C17	ND	10	mg/kg	SW846 8015B
C18-C19	ND	10	mg/kg	SW846 8015B
C20-C23	ND	10	mg/kg	SW846 8015B
C24-C27	ND	10	mg/kg	SW846 8015B
C28-C31	ND	10	mg/kg	SW846 8015B
C32-C35	ND	10	mg/kg	SW846 8015B
C36-C39	ND	10	mg/kg	SW846 8015B
C40+	ND	10	mg/kg	SW846 8015B
Total Carbon Chain Range	ND	10	mg/kg	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Benzo(a)pyrene	85	(60 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000023

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #....: E1J230204 Work Order #....: EML541AA Matrix.....: SOLID
MB Lot-Sample #: E1J230000-478
Analysis Date...: 10/23/01 Prep Date.....: 10/23/01 Analysis Time..: 18:46
Dilution Factor: 1 Prep Batch #: 1296478 Instrument ID..: G8B
Analyst ID.....: 018568

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Decachlorobiphenyl	118	(60 - 140)	
Tetrachloro-m-xylene	102	(60 - 140)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000024

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1J230204 Work Order #...: EMM6R1AA Matrix.....: SOLID
 MB Lot-Sample #: E1J240000-233
 Analysis Date.: 10/23/01 Prep Date.....: 10/23/01 Analysis Time.: 10:53
 Dilution Factor: 1 Prep Batch #: 1297233 Instrument ID.: MSD
 Analyst ID....: 999998

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Acrolein	ND	100	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	10	ug/kg	SW846 8260B
Acetone	ND	25	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Vinyl acetate	ND	10	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	25	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Tetrahydrofuran	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	25	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	25	ug/kg	SW846 8260B

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000025

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E1J230204 Work Order #...: EMM6R1AA Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	10	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
t-Butanol	ND	100	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>	
Bromofluorobenzene	96		(70 - 130)	
1,2-Dichloroethane-d4	82		(60 - 140)	
Toluene-d8	83		(70 - 130)	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

000026

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: E1J230204

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ORDER #
		LIMIT	UNITS					
MB Lot-Sample #: E1J230000-3'71 Prep Batch #...: 1296371								
Arsenic	ND	1.0	mg/kg	SW846 6010B		10/23/01		EMLQC1AA
		Dilution Factor: 1						
		Analysis Time...: 17:17		Analyst ID....: 021088		Instrument ID...: M01		
Lead	ND	0.50	mg/kg	SW846 6010B		10/23/01		EMLQC1AH
		Dilution Factor: 1						
		Analysis Time...: 17:17		Analyst ID....: 021088		Instrument ID...: M01		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000027

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E1J230204 **Work Order #...**: EML0A1AC **Matrix.....**: SOLID
LCS Lot-Sample#: E1J230000-437
Prep Date.....: 10/23/01 **Analysis Date...**: 10/23/01
Prep Batch #...: 1296437 **Analysis Time...**: 13:28
Dilution Factor: 1 **Instrument ID...**: G15
Analyst ID.....: 001464

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	
TPH (as Gasoline)	5.00	4.14	83	SW846 8015B
SURROGATE				
a,a,a-Trifluorotoluene (TFT)				
		<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>	
		125	(60 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000028

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1J230204 Work Order #....: EML131AC Matrix.....: SOLID
 LCS Lot-Sample#: E1J230000-453
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #....: 1296453 Analysis Time...: 21:15
 Dilution Factor: 1 Instrument ID...: G02
 Analyst ID.....: 356074

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	
TPH (as Diesel)	250	246	98	SW846 8015B
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
Benzo (a) pyrene		94	LIMITS (60 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000023

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1J230204 Work Order #....: EML541AC Matrix.....: SOLID
LCS Lot-Sample#: E1J230000-478
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #....: 1296478 Analysis Time...: 19:25
 Dilution Factor: 1 Instrument ID...: G8B
 Analyst ID.....: 018568

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>METHOD</u>
Aroclor 1016	333	342	ug/kg	103	SW846 8082
Aroclor 1260	333	359	ug/kg	108	SW846 8082

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Decachlorobiphenyl	124	(60 - 140)
Tetrachloro-m-xylene	121	(60 - 140)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000030

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E1J230204 Work Order #....: EMM6R1AC Matrix.....: SOLID
LCS Lot-Sample#: E1J240000-233
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #....: 1297233 Analysis Time...: 10:23
 Dilution Factor: 1 Instrument ID...: MSD
 Analyst ID.....: 999998

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	<u>METHOD</u>
1,1-Dichloroethene	50.0	41.6	83	SW846 8260B
Benzene	50.0	46.6	93	SW846 8260B
Trichloroethene	50.0	50.0	100	SW846 8260B
Toluene	50.0	47.3	95	SW846 8260B
Chlorobenzene	50.0	49.4	99	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	92	(70 - 130)
1,2-Dichloroethane-d4	89	(60 - 140)
Toluene-d8	84	(70 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000031

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1J230204

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	PREPARATION- METHOD	WORK ANALYSIS DATE	ORDER #	
LCS Lot-Sample#:	E1J230000-371 Prep Batch #...: 1296371							
Arsenic	200	178	mg/kg	89	SW846 6010B	10/23/01	EMLQC1AU	
			Dilution Factor:	1				
			Analysis Time..:	17:24	Analyst ID....: 021088	Instrument ID...: M01		
Lead	50.0	44.2	mg/kg	88	SW846 6010B	10/23/01	EMLQC1A2	
			Dilution Factor:	1				
			Analysis Time..:	17:24	Analyst ID....: 021088	Instrument ID...: M01		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000032

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: E1J230204 Work Order #....: EML0A1AC Matrix.....: SOLID
LCS Lot-Sample#: E1J230000-437
Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
Prep Batch #....: 1296437 Analysis Time...: 13:28
Dilution Factor: 1 Instrument ID...: G15
Analyst ID.....: 001464

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
TPH (as Gasoline)	83	(80 - 140)	SW846 8015B
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
a, a, a-Trifluorotoluene (TFT)	125	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000033

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E1J230204 Work Order #...: EML131AC Matrix.....: SOLID
LCS Lot-Sample#: E1J230000-453
Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
Prep Batch #:...: 1296453 Analysis Time...: 21:15
Dilution Factor: 1 Instrument ID...: G02
Analyst ID.....: 356074

PARAMETER	PERCENT	RECOVERY	METHOD
	<u>RECOVERY</u>	<u>LIMITS</u>	
TPH (as Diesel)	98	(60 - 130)	SW846 8015B
SURROGATE	PERCENT	RECOVERY	
Benzo (a) pyrene	<u>RECOVERY</u>	<u>LIMITS</u>	
	94	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000034

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: E1J230204 Work Order #....: EML541AC Matrix.....: SOLID
 LCS Lot-Sample#: E1J230000-478
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #....: 1296478 Analysis Time...: 19:25
 Dilution Factor: 1 Instrument ID...: G8B
 Analyst ID.....: 018568

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Aroclor 1016	103	(65 - 130)	SW846 8082
Aroclor 1260	108	(70 - 130)	SW846 8082
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
Decachlorobiphenyl	124	(60 - 140)	
Tetrachloro-m-xylene	121	(60 - 140)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000035

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1J230204 Work Order #....: EMM6R1AC Matrix.....: SOLID
 LCS Lot-Sample#: E1J240000-233
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #....: 1297233 Analysis Time...: 10:23
 Dilution Factor: 1 Instrument ID...: MSD
 Analyst ID.....: 999998

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	83	(60 - 150)	SW846 8260B
Benzene	93	(70 - 140)	SW846 8260B
Trichloroethene	100	(70 - 130)	SW846 8260B
Toluene	95	(70 - 130)	SW846 8260B
Chlorobenzene	99	(70 - 130)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	92	(70 - 130)
1,2-Dichloroethane-d4	89	(60 - 140)
Toluene-d8	84	(70 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000036

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: E1J230204

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: E1J230000-371 Prep Batch #...: 1296371					
Arsenic	89	(75 - 115)	SW846 6010B	10/23/01	EMLQC1AU
		Dilution Factor: 1			
		Analysis Time...: 17:24	Analyst ID.....: 021088	Instrument ID...: M01	
Lead	88	(80 - 120)	SW846 6010B	10/23/01	EMLQC1A2
		Dilution Factor: 1			
		Analysis Time...: 17:24	Analyst ID.....: 021088	Instrument ID...: M01	

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

000037

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E1J230204 Work Order #....: EMKGM1AD-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J220194-002 EMKGM1AE-MSD
 Date Sampled...: 10/22/01 11:45 Date Received...: 10/22/01 17:45 MS Run #.....: 1297096
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #....: 1297233 Analysis Time...: 18:05
 Dilution Factor: 1 Analyst ID.....: 999998 Instrument ID...: MSD

<u>PARAMETER</u>	<u>SAMPLE</u>	<u>SPIKE</u>	<u>MEASRD</u>	<u>PERCENT</u>			<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>	<u>RPD</u>	
1,1-Dichloroethene	ND	50.0	44.1	ug/kg	88	17	SW846 8260B
	ND	50.0	37.1	ug/kg	74	17	SW846 8260B
Benzene	ND	50.0	45.4	ug/kg	91		SW846 8260B
	ND	50.0	40.8	ug/kg	82	11	SW846 8260B
Trichloroethene	ND	50.0	50.8	ug/kg	102		SW846 8260B
	ND	50.0	45.3	ug/kg	91	11	SW846 8260B
Toluene	ND	50.0	45.6	ug/kg	91		SW846 8260B
	ND	50.0	39.0	ug/kg	78	16	SW846 8260B
Chlorobenzene	ND	50.0	47.8	ug/kg	96		SW846 8260B
	ND	50.0	41.4	ug/kg	83	14	SW846 8260B
<u>SURROGATE</u>							
Bromofluorobenzene			<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>		
			92		(70 - 130)		
			91		(70 - 130)		
1,2-Dichloroethane-d4			85		(60 - 140)		
			87		(60 - 140)		
Toluene-d8			86		(70 - 130)		
			85		(70 - 130)		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Gold print denotes control parameters

000038

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1J230204

Matrix.....: SOLID

Date Sampled...: 10/22/01 10:10 Date Received...: 10/23/01 10:30

<u>PARAMETER</u>	<u>SAMPLE SPIKE MEASURED</u>			<u>PERCNT</u>	<u>PREPARATION-</u>	<u>WORK</u>	
	<u>AMOUNT</u>	<u>AMT</u>	<u>UNITS</u>	<u>RECVRY</u>	<u>RPD</u>	<u>ANALYSIS DATE</u>	<u>ORDER #</u>
MS Lot-Sample #: E1J230198-001 Prep Batch #...: 1296371							
Arsenic							
23.2	200	202	mg/kg	89	SW846 6010B	10/23/01	EMLJ81AU
23.2	200	200	mg/kg	89	0.59 SW846 6010B	10/23/01	EMLJ81AV
Dilution Factor: 1							
Analysis Time...: 18:05 Instrument ID...: M01 Analyst ID.....: 021088							
MS Run #.....: 1296185							
Lead							
436	50.0	503 NC	mg/kg		SW846 6010B	10/23/01	EMLJ81A8
436	50.0	480 NC	mg/kg		SW846 6010B	10/23/01	EMLJ81A9
Dilution Factor: 1							
Analysis Time...: 18:05 Instrument ID...: M01 Analyst ID.....: 021088							
MS Run #.....: 1296185							

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

000039

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E1J230204 Work Order #...: EMLLVIAJ-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J230204-001 EMLLVIAK-MSD
 Date Sampled...: 10/23/01 09:00 Date Received...: 10/23/01 12:25 MS Run #.....: 1296246
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #...: 1296478 Analysis Time...: 21:25
 Dilution Factor: 1 Analyst ID....: 018568 Instrument ID...: G8B

<u>PARAMETER</u>	SAMPLE	SPIKE	MEASRD	PERCENT			
	<u>AMOUNT</u>	<u>AMT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
Aroclor 1016	ND	333	304	ug/kg	91		SW846 8082
	ND	333	317	ug/kg	95	4.3	SW846 8082
Aroclor 1260	93	333	311	ug/kg	65		SW846 8082
	Qualifiers: a, MSC						
	93	333	319	ug/kg	68	2.5	SW846 8082
	Qualifiers: a, MSC						

<u>SURROGATE</u>	PERCENT		RECOVERY
	<u>RECOVERY</u>	<u>LIMITS</u>	
Decachlorobiphenyl	114	(60 - 140)	
	118	(60 - 140)	
Tetrachloro-m-xylene	101	(60 - 140)	
	105	(60 - 140)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analytic recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

000040

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: E1J230204 Work Order #....: EMLMJ1AJ-MS Matrix.....: SOLID
MS Lot-Sample #: E1J230204-002 EMLMJ1AK-MSD
 Date Sampled...: 10/23/01 09:05 Date Received...: 10/23/01 12:25 MS Run #.....: 1296215
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #....: 1296437 Analysis Time...: 15:17
 Dilution Factor: 1 Analyst ID....: 001464 Instrument ID.: G15

<u>PARAMETER</u>	<u>SAMPLE</u>	<u>SPIKE</u>	<u>MEASRD</u>	<u>PERCENT</u>			
	<u>AMOUNT</u>	<u>AMT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
TPH (as Gasoline)	ND	5.00	4.55	mg/kg	91		SW846 8015B
	ND	5.00	4.74	mg/kg	95	4.1	SW846 8015B
<u>SURROGATE</u>						<u>PERCENT</u>	<u>RECOVERY</u>
a,a,a-Trifluorotoluene						<u>RECOVERY</u>	<u>LIMITS</u>
(TFT)						110	(60 - 130)
						109	(60 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000041

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1J230204 Work Order #....: EMLMJ1AL-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J230204-002 EMLMJ1AM-MSD
 Date Sampled...: 10/23/01 09:05 Date Received...: 10/23/01 12:25 MS Run #.....: 1296227
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #....: 1296453 Analysis Time...: 23:12
 Dilution Factor: 1 Analyst ID....: 356074 Instrument ID.: G02

<u>PARAMETER</u>	<u>SAMPLE</u>	<u>SPIKE</u>	<u>MEASRD</u>	<u>PERCENT</u>			
	<u>AMOUNT</u>	<u>AMT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
TPH (as Diesel)	ND	250	232	mg/kg	93		SW846 8015B
	ND	250	206	mg/kg	82	12	SW846 8015B
<u>SURROGATE</u>			<u>PERCENT</u>			<u>RECOVERY</u>	
Benzo (a) pyrene			<u>RECOVERY</u>			<u>LIMITS</u>	
			83			(60 - 130)	
			71			(60 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000042

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1J230204 Work Order #....: EMKGM1AD-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J220194-002 EMKGM1AE-MSD
 Date Sampled...: 10/22/01 11:45 Date Received...: 10/22/01 17:45 MS Run #.....: 1297096
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #....: 1297233 Analysis Time...: 18:05
 Dilution Factor: 1 Analyst ID.....: 999998 Instrument ID...: MSD

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	88	(60 - 150)			SW846 8260B
	74	(60 - 150)	17	(0-30)	SW846 8260B
Benzene	91	(70 - 140)			SW846 8260B
	82	(70 - 140)	11	(0-30)	SW846 8260B
Trichloroethene	102	(70 - 130)			SW846 8260B
	91	(70 - 130)	11	(0-30)	SW846 8260B
Toluene	91	(70 - 130)			SW846 8260B
	78	(70 - 130)	16	(0-30)	SW846 8260B
Chlorobenzene	96	(70 - 130)			SW846 8260B
	83	(70 - 130)	14	(0-30)	SW846 8260B
<u>SURROGATE</u>					
Bromofluorobenzene		<u>PERCENT RECOVERY</u>		<u>RECOVERY LIMITS</u>	
		92		(70 - 130)	
		91		(70 - 130)	
1,2-Dichloroethane-d4		85		(60 - 140)	
		87		(60 - 140)	
Toluene-d8		86		(70 - 130)	
		85		(70 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000043

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1J230204

Matrix.....: SOLID

Date Sampled...: 10/22/01 10:10 Date Received...: 10/23/01 10:30

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
						<u>ANALYSIS DATE</u>	<u>ORDER #</u>
MS Lot-Sample #: E1J230198-001 Prep Batch #...: 1296371							
Arsenic	89	(75 - 115)			SW846 6010B	10/23/01	EMLJ81AU
	89	(75 - 115) 0.59 (0-25)	0.59	(0-25)	SW846 6010B	10/23/01	EMLJ81AV
					Dilution Factor: 1		
					Analysis Time...: 18:05	Instrument ID...: M01	Analyst ID.....: 021088
					MS Run #.....: 1296185		
Lead	NC	(80 - 120)			SW846 6010B	10/23/01	EMLJ81A8
	NC	(80 - 120)	(0-25)	(0-25)	SW846 6010B	10/23/01	EMLJ81A9
					Dilution Factor: 1		
					Analysis Time...: 18:05	Instrument ID...: M01	Analyst ID.....: 021088
					MS Run #.....: 1296185		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

000044

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E1J230204 Work Order #...: EMLLV1AJ-MS Matrix.....: SOLID
 MS Lot-Sample #: E1J230204-001 EMLLV1AK-MSD
 Date Sampled...: 10/23/01 09:00 Date Received...: 10/23/01 12:25 MS Run #.....: 1296246
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #...: 1296478 Analysis Time...: 21:25
 Dilution Factor: 1 Analyst ID.....: 018568 Instrument ID...: G8B

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
Aroclor 1016	91	(65 - 130)	4.3	(0-30)	SW846 8082
	95	(65 - 130)			SW846 8082
Aroclor 1260	65 a, MSC	(70 - 130)	2.5	(0-30)	SW846 8082
	68 a, MSC	(70 - 130)			SW846 8082

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Decachlorobiphenyl	114	(60 - 140)
	118	(60 - 140)
Tetrachloro-m-xylene	101	(60 - 140)
	105	(60 - 140)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

000045

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E1J230204 Work Order #...: EMLMJ1AJ-MS Matrix.....: SOLID
MS Lot-Sample #: E1J230204-002 EMLMJ1AK-MSD
Date Sampled...: 10/23/01 09:05 Date Received...: 10/23/01 12:25 MS Run #.....: 1296215
Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
Prep Batch #...: 1296437 Analysis Time...: 15:17
Dilution Factor: 1 Analyst ID....: 001464 Instrument ID.: G1S

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	91	(80 - 140)			SW846 8015B
	95	(80 - 140)	4.1	(0-40)	SW846 8015B
SURROGATE	PERCENT RECOVERY	RECOVERY			
a,a,a-Trifluorotoluene (TFT)	110	(60 - 130)			
	109	(60 - 130)			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000046

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E1J230204 Work Order #...: EMLMJ1AL-MS Matrix.....: SOLID
MS Lot-Sample #: E1J230204-002 EMLMJ1AM-MSD
 Date Sampled...: 10/23/01 09:05 Date Received...: 10/23/01 12:25 MS Run #.....: 1296227
 Prep Date.....: 10/23/01 Analysis Date...: 10/23/01
 Prep Batch #...: 1296453 Analysis Time...: 23:12
 Dilution Factor: 1 Analyst ID....: 356074 Instrument ID...: G02

<u>PARAMETER</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>	<u>RPD</u>	<u>RPD</u> <u>LIMITS</u>	<u>METHOD</u>
TPH (as Diesel)	93 82	(60 - 130) (60 - 130)	12	(0-35)	SW846 8015B SW846 8015B
SURROGATE		<u>PERCENT</u> <u>RECOVERY</u>		<u>RECOVERY</u> <u>LIMITS</u>	
Benzo(a)pyrene		83 71		(60 - 130) (60 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000047



Subcontract Reports

000048



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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY REPORT

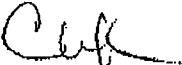
Prepared For: STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705

Attention: Diane Suzuki
Project: E1J230204

Sampled: 10/23/01
Received: 10/24/01
Reported: 10/31/01

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Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

000049

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CKJ0309 <Page 1 of 5>



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 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles
 1721 S. Grand Avenue
 Santa Ana, CA 92705
 Attention: Diane Suzuki

Client Project ID: EIJ230204

Report Number: CKJ0309

Sampled: 10/23/01
 Received: 10/24/01

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Method	Reporting Batch	Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			ug/kg		ug/kg			
Sample ID: CKJ0309-01 (SP_24_102301_1 - Soil)								
Acenaphthene	EPA 8310	C1J2610	50	ND	1	10/26/01	10/30/01	
Acenaphthylene	EPA 8310	C1J2610	200	ND	1	10/26/01	10/30/01	
Anthracene	EPA 8310	C1J2610	2.0	ND	1	10/26/01	10/30/01	
Benzo(a)anthracene	EPA 8310	C1J2610	2.0	9.2	1	10/26/01	10/30/01	
Benzo(a)pyrene	EPA 8310	C1J2610	2.0	12	1	10/26/01	10/30/01	
Benzo(b)fluoranthene	EPA 8310	C1J2610	5.0	ND	1	10/26/01	10/30/01	
Benzo(g,h,i)perylene	EPA 8310	C1J2610	5.0	7.3	1	10/26/01	10/30/01	
Benzo(k)fluoranthene	EPA 8310	C1J2610	2.0	6.0	1	10/26/01	10/30/01	
Chrysene	EPA 8310	C1J2610	5.0	ND	1	10/26/01	10/30/01	
Dibenzo(a,h)anthracene	EPA 8310	C1J2610	5.0	ND	1	10/26/01	10/30/01	
Fluoranthene	EPA 8310	C1J2610	5.0	26	1	10/26/01	10/30/01	
Fluorene	EPA 8310	C1J2610	5.0	ND	1	10/26/01	10/30/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1J2610	5.0	ND	1	10/26/01	10/30/01	
Naphthalene	EPA 8310	C1J2610	40	ND	1	10/26/01	10/30/01	
Phenanthrene	EPA 8310	C1J2610	5.0	9.8	1	10/26/01	10/30/01	
Pyrene	EPA 8310	C1J2610	5.0	20	1	10/26/01	10/30/01	
<i>Surrogate: 2-Methylnanthracene (35-115%)</i>								
Sample ID: CKJ0309-02 (SP_24_102301_2 - Soil)								
Acenaphthene	EPA 8310	C1J2610	250	ND	5	10/26/01	10/30/01	
Acenaphthylene	EPA 8310	C1J2610	1000	ND	5	10/26/01	10/30/01	
Anthracene	EPA 8310	C1J2610	10	ND	5	10/26/01	10/30/01	
Benzo(a)anthracene	EPA 8310	C1J2610	10	25	5	10/26/01	10/30/01	
Benzo(a)pyrene	EPA 8310	C1J2610	10	32	5	10/26/01	10/30/01	
Benzo(b)fluoranthene	EPA 8310	C1J2610	25	ND	5	10/26/01	10/30/01	
Benzo(g,h,i)perylene	EPA 8310	C1J2610	25	ND	5	10/26/01	10/30/01	
Benzo(k)fluoranthene	EPA 8310	C1J2610	10	14	5	10/26/01	10/30/01	
Chrysene	EPA 8310	C1J2610	25	ND	5	10/26/01	10/30/01	
Dibenzo(a,h)anthracene	EPA 8310	C1J2610	25	ND	5	10/26/01	10/30/01	
Fluoranthene	EPA 8310	C1J2610	25	74	5	10/26/01	10/30/01	
Fluorene	EPA 8310	C1J2610	25	ND	5	10/26/01	10/30/01	
Indeno(1,2,3-cd)pyrene	EPA 8310	C1J2610	25	ND	5	10/26/01	10/30/01	
Naphthalene	EPA 8310	C1J2610	200	ND	5	10/26/01	10/30/01	
Phenanthrene	EPA 8310	C1J2610	25	53	5	10/26/01	10/30/01	
Pyrene	EPA 8310	C1J2610	25	62	5	10/26/01	10/30/01	
<i>Surrogate: 2-Methylnanthracene (35-115%)</i>								
96.8 %								

Del Mar Analytical, Colton
 Clifton J. Kiser
 Project Manager

000050

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CKJ0309 <Page 2 of 5>



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9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-9698 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1J230204

Report Number: CKJ0309

Sampled: 10/23/01

Received: 10/24/01

METHOD BLANK/QC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	Data Limit	Qualifiers
<u>Batch: C1J2610 Extracted: 10/26/01</u>									
Blank Analyzed: 10/30/01 (C1J2610-BLK1)									
Acenaphthene	ND	50	ug/kg						
Acenaphthylene	ND	200	ug/kg						
Anthracene	ND	2.0	ug/kg						
Benzo(a)anthracene	ND	2.0	ug/kg						
Benzo(a)pyrene	ND	2.0	ug/kg						
Benzo(b)fluoranthene	ND	5.0	ug/kg						
Benzo(g,h,i)perylene	ND	5.0	ug/kg						
Benzo(k)fluoranthene	ND	2.0	ug/kg						
Chrysene	ND	5.0	ug/kg						
Dibenz(a,h)anthracene	ND	5.0	ug/kg						
Fluoranthene	ND	5.0	ug/kg						
Fluorene	ND	5.0	ug/kg						
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/kg						
Naphthalene	ND	40	ug/kg						
Phenanthrene	ND	5.0	ug/kg						
Pyrene	ND	5.0	ug/kg						
Surrogate: 2-Methylanthracene	4.61		ug/kg	8.00		57.6	35-115		
LCS Analyzed: 10/30/01 (C1J2610-BS1)									M-NR
Acenaphthene	117	50	ug/kg	160		73.1	45-115		
Acenaphthylene	298	200	ug/kg	320		93.1	50-115		
Anthracene	10.9	2.0	ug/kg	16.0		68.1	55-115		
Benzo(a)anthracene	14.0	2.0	ug/kg	16.0		87.5	65-115		
Benzo(a)pyrene	9.76	2.0	ug/kg	16.0		61.0	55-115		
Benzo(b)fluoranthene	26.4	5.0	ug/kg	32.0		82.5	65-115		
Benzo(g,h,i)perylene	27.6	5.0	ug/kg	32.0		86.2	60-115		
Benzo(k)fluoranthene	13.4	2.0	ug/kg	16.0		83.8	65-115		
Chrysene	13.8	5.0	ug/kg	16.0		86.2	65-115		
Dibenz(a,h)anthracene	27.8	5.0	ug/kg	32.0		86.9	60-115		
Fluoranthene	27.3	5.0	ug/kg	32.0		85.3	65-115		
Fluorene	24.6	5.0	ug/kg	32.0		76.9	55-115		
Indeno(1,2,3-cd)pyrene	13.2	5.0	ug/kg	16.0		82.5	55-115		
Naphthalene	134	40	ug/kg	160		83.8	45-115		
Phenanthrene	13.8	5.0	ug/kg	16.0		86.2	55-120		
Pyrene	15.1	5.0	ug/kg	16.0		94.4	55-115		

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

000051

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CKJ0309 <Page 3 of 5>



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9830 South 81st St., Suite B-120, Phoenix, AZ 85044 (480) 705-0043 FAX (480) 785-0851

STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1J230204

Report Number: CKJ0309

Sampled: 10/23/01
Received: 10/24/01

METHOD BLANK/QC DATA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	Data Limit	Qualifiers
<u>Batch: C1J2610 Extracted: 10/26/01</u>									
LCS Analyzed: 10/30/01 (C1J2610-BS1)									M-NR
Surrogate: 2-Methylnanthracene	5.35		ug/kg	8.00		66.9	35-115		

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

000052

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CKJ0309 <Page 4 of 5>



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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

STL Los Angeles
1721 S. Grand Avenue
Santa Ana, CA 92705
Attention: Diane Suzuki

Client Project ID: E1J230204

Report Number: CKJ0309

Sampled: 10/23/01

Received: 10/24/01

DATA QUALIFIERS AND DEFINITIONS

- M-NR No results were reported for the MS/MSD. The sample used for the MS/MSD required dilution due to the sample matrix. Because of this, the spike compounds were diluted below the detection limit.
- ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- NR Not reported.
- RPD Relative Percent Difference

Del Mar Analytical, Colton
Clifton J. Kiser
Project Manager

000053

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CKJ0309 <Page 5 of 5>

**Chain of
Custody Record**

STL-4124 (0700)

**SEVERN
TRENT
SERVICES**

Severn Trent Laboratories, Inc.

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Con-

SEVERN
TRENT
SERVICES

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705-4808

December 10, 2001

STL LOT NUMBER: E1K300329
NELAP Certification Number: 01118CA
PO/CONTRACT: 05160-SEV002-S56

Tel: 714 258 8610
Fax: 714 258 0921
www.stl-inc.com

Scott Zachary
Haley & Aldrich Inc
9040 Friars Road
Suite 202
San Diego, CA 92108

Dear Mr. Zachary,

This report contains the analytical results for the sample received under chain of custody by STL Los Angeles on November 30, 2001. This sample is associated with your BRC former C-6 Torrance Harbor Gateway project.

All applicable quality control procedures met method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,



Diane Suzuki
Project Manager

CC: Project File

Page 1 of 000050 total pages in this report.

000001

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SEVERN
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SERVICES

Analytical Report

000004

EXECUTIVE SUMMARY - Detection Highlights

E1K300329

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
1_VEW_24_113001 11/30/01 14:00 001				
Mercury	0.086 B	0.10	mg/kg	SW846 7471A
Aluminum	20100	20.0	mg/kg	SW846 6010B
Arsenic	6.4	1.0	mg/kg	SW846 6010B
Barium	149	2.0	mg/kg	SW846 6010B
Cadmium	0.16 B,J	0.50	mg/kg	SW846 6010B
Chromium	31.5 J	1.0	mg/kg	SW846 6010B
Beryllium	0.71 J	0.50	mg/kg	SW846 6010B
Lead	6.0	0.50	mg/kg	SW846 6010B
Cobalt	11.3	5.0	mg/kg	SW846 6010B
Copper	26.7	2.5	mg/kg	SW846 6010B
Molybdenum	1.9 B	4.0	mg/kg	SW846 6010B
Nickel	21.0	4.0	mg/kg	SW846 6010B
Vanadium	56.8	5.0	mg/kg	SW846 6010B
Zinc	73.0	2.0	mg/kg	SW846 6010B
2-Butanone	51	25	ug/kg	SW846 8260B

000005

METHODS SUMMARY

E1K300329

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Extractable Petroleum Hydrocarbons	SW846 8015B	SANA AUTO-SHAKE
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310	SW846 3550
Volatile Organics by GC/MS	SW846 8260B	SW846 5030
Volatile Petroleum Hydrocarbons	SW846 8015B	SW846 5030

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

000006

SAMPLE SUMMARY

E1K300329

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
EPRDF	001	1_VEW_24_113001	11/30/01	14:00

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

000007

HALEY & ALDRICH INC

Client Sample ID: 1_VIEW_24_113001

GC Semivolatiles

Lot-Sample #....: E1K300329-001 Work Order #....: EPRDF1AA Matrix.....: SOLID
 Date Sampled...: 11/30/01 14:00 Date Received...: 11/30/01 16:50 MS Run #.....: 1337164
 Prep Date.....: 12/03/01 Analysis Date...: 12/04/01
 Prep Batch #....: 1337324 Analysis Time...: 15:22
 Dilution Factor: 1
 Analyst ID.....: 356074 Instrument ID...: G02
 Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
C8-C9	ND	10	mg/kg	5.0
TPH (as Diesel)	ND	10	mg/kg	6.0
C10-C11	ND	10	mg/kg	5.0
C12-C13	ND	10	mg/kg	5.0
C14-C15	ND	10	mg/kg	5.0
C16-C17	ND	10	mg/kg	5.0
C18-C19	ND	10	mg/kg	5.0
C20-C23	ND	10	mg/kg	5.0
C24-C27	ND	10	mg/kg	5.0
C28-C31	ND	10	mg/kg	5.0
C32-C35	ND	10	mg/kg	5.0
C36-C39	ND	10	mg/kg	5.0
C40+	ND	10	mg/kg	5.0
Total Carbon Chain Range	ND	10	mg/kg	5.0
<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY		
		<u>RECOVERY</u>	<u>LIMITS</u>	
Benzo(a)pyrene	85	(60 - 130)		

000008

EALEY & ALDRICH INC

Client Sample ID: 1_VEW_24_113001

GC Volatiles

Lot-Sample #....: E1K300329-001 Work Order #....: EPRDF1AC Matrix.....: SOLID
Date Sampled...: 11/30/01 14:00 Date Received...: 11/30/01 16:50 MS Run #.....: 1338166
Prep Date.....: 12/04/01 Analysis Date...: 12/04/01
Prep Batch #....: 1338348 Analysis Time...: 00:47
Dilution Factor: 1
Analyst ID.....: 001464 Instrument ID...: G15
Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
C6-C8	ND	1.0	mg/kg	0.10
<u>SURROGATE</u>		PERCENT	RECOVERY	
a,a,a-Trifluorotoluene (TFT)	85	RECOVERY	LIMITS	
		(60 - 130)		

000009

HALEY & ALDRICH INC

Client Sample ID: 1_VEW_24_113001

GC/MS Volatiles

Lot-Sample #....: E1K300329-001 Work Order #....: EPRDF1AD Matrix.....: SOLID
 Date Sampled....: 11/30/01 14:00 Date Received...: 11/30/01 16:50 MS Run #.....: 1338156
 Prep Date.....: 12/03/01 Analysis Date...: 12/03/01
 Prep Batch #....: 1338327 Analysis Time...: 16:06
 Dilution Factor: 1
 Analyst ID.....: 999998 Instrument ID...: MSD
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	10	ug/kg	1.0
Chloromethane	ND	10	ug/kg	3.0
Vinyl chloride	ND	10	ug/kg	2.0
Bromomethane	ND	10	ug/kg	2.0
1,2-Dibromoethane	ND	5.0	ug/kg	3.0
Chloroethane	ND	10	ug/kg	2.0
Trichlorofluoromethane	ND	10	ug/kg	2.0
Acrolein	ND	100	ug/kg	30
1,1-Dichloroethene	ND	5.0	ug/kg	2.0
Iodomethane	ND	10	ug/kg	5.0
Acetone	ND	25	ug/kg	15
Carbon disulfide	ND	5.0	ug/kg	2.0
Methylene chloride	ND	5.0	ug/kg	3.0
trans-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
Acrylonitrile	ND	100	ug/kg	30
Methyl tert-butyl ether	ND	5.0	ug/kg	1.0
1,1-Dichloroethane	ND	5.0	ug/kg	1.0
Vinyl acetate	ND	10	ug/kg	5.0
2,2-Dichloropropane	ND	5.0	ug/kg	2.0
cis-1,2-Dichloroethene	ND	5.0	ug/kg	2.0
2-Butanone	51	25	ug/kg	15
Bromochloromethane	ND	5.0	ug/kg	1.0
Chloroform	ND	5.0	ug/kg	1.0
Tetrahydrofuran	ND	20	ug/kg	10
1,1,1-Trichloroethane	ND	5.0	ug/kg	1.0
1,1-Dichloropropene	ND	5.0	ug/kg	1.0
Carbon tetrachloride	ND	5.0	ug/kg	1.0
Benzene	ND	5.0	ug/kg	2.0
1,2-Dichloroethane	ND	5.0	ug/kg	1.0
Trichloroethene	ND	5.0	ug/kg	2.0
1,2-Dichloropropane	ND	5.0	ug/kg	1.0
Bromodichloromethane	ND	5.0	ug/kg	1.0
2-Chloroethyl vinyl ether	ND	10	ug/kg	5.0
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1.0
4-Methyl-2-pentanone	ND	25	ug/kg	10
Toluene	ND	5.0	ug/kg	2.0
trans-1,3-Dichloropropene	ND	5.0	ug/kg	3.0

(Continued on next page)

000010

HALEY & ALDRICH INC

Client Sample ID: 1_VEW_24_113001

GC/MS Volatiles

Lot-Sample #....: E1K300329-001 Work Order #....: EPRDF1AD Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
1,1,2-Trichloroethane	ND	5.0	ug/kg	3.0
Tetrachloroethene	ND	5.0	ug/kg	2.0
2-Hexanone	ND	25	ug/kg	10
Dibromochloromethane	ND	5.0	ug/kg	5.0
Chlorobenzene	ND	5.0	ug/kg	2.0
Ethylbenzene	ND	5.0	ug/kg	2.0
Xylenes (total)	ND	5.0	ug/kg	3.0
Styrene	ND	10	ug/kg	2.0
Bromoform	ND	5.0	ug/kg	3.0
Isopropylbenzene	ND	5.0	ug/kg	2.0
p-Isopropyltoluene	ND	5.0	ug/kg	2.0
Bromobenzene	ND	5.0	ug/kg	2.0
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	3.0
1,2,3-Trichloropropane	ND	5.0	ug/kg	3.0
n-Propylbenzene	ND	5.0	ug/kg	2.0
2-Chlorotoluene	ND	5.0	ug/kg	2.0
4-Chlorotoluene	ND	5.0	ug/kg	2.0
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	2.0
tert-Butylbenzene	ND	5.0	ug/kg	2.0
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	2.0
sec-Butylbenzene	ND	5.0	ug/kg	2.0
1,3-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,4-Dichlorobenzene	ND	5.0	ug/kg	2.0
1,2-Dichlorobenzene	ND	5.0	ug/kg	2.0
n-Butylbenzene	ND	5.0	ug/kg	2.0
1,2-Dibromo-3-chloro-propane	ND	10	ug/kg	3.0
1,2,4-Trichloro-benzene	ND	5.0	ug/kg	2.0
Hexachlorobutadiene	ND	5.0	ug/kg	2.0
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	2.0
t-Butanol	ND	100	ug/kg	50
Isopropyl ether	ND	10	ug/kg	1.0
Tert-amyl methyl ether	ND	10	ug/kg	2.0
Tert-butyl ethyl ether	ND	10	ug/kg	1.0
<u>SURROGATE</u>		<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
Bromofluorobenzene	76	(65 - 135)		
1,2-Dichloroethane-d4	102	(60 - 140)		
Toluene-d8	83	(70 - 130)		

000011

HALEY & ALDRICH INC

Client Sample ID: 1_VEW_24_113001

HPLC

Lot-Sample #....: E1K300329-001 Work Order #....: EPRDF1A1 Matrix.....: SOLID
 Date Sampled....: 11/30/01 14:00 Date Received...: 11/30/01 16:50 MS Run #.....: 1337148
 Prep Date.....: 12/03/01 Analysis Date...: 12/05/01
 Prep Batch #....: 1337305 Analysis Time...: 18:47
 Dilution Factor: 1
 Analyst ID.....: 033077 Instrument ID...: LC7
 Method.....: SW846 8310

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Acenaphthene	ND	400	ug/kg	63
Acenaphthylene	ND	200	ug/kg	46
Anthracene	ND	8.0	ug/kg	1.1
Benzo (a) anthracene	ND	16	ug/kg	1.7
Benzo (a) pyrene	ND	10	ug/kg	3.1
Benzo (b) fluoranthene	ND	4.0	ug/kg	2.4
Benzo (ghi)perylene	ND	16	ug/kg	3.1
Benzo (k) fluoranthene	ND	4.0	ug/kg	1.1
Chrysene	ND	20	ug/kg	14
Dibenz (a, h) anthracene	ND	40	ug/kg	9.2
Fluoranthene	ND	20	ug/kg	4.8
Fluorene	ND	40	ug/kg	6.7
Indeno (1, 2, 3-cd) pyrene	ND	20	ug/kg	3.1
Naphthalene	ND	200	ug/kg	23
Phenanthrenene	ND	16	ug/kg	2.6
Pyrene	ND	40	ug/kg	11
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
1-Methylnaphthalene		RECOVERY	<u>LIMITS</u>	
		60	(41 - 115)	

000012

HALEY & ALDRICH INC

Client Sample ID: 1_VEW_24_113001

TOTAL Metals

Lot-Sample #....: E1K300329-001 Matrix.....: SOLID
 Date Sampled...: 11/30/01 14:00 Date Received..: 11/30/01 16:50

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Prep Batch #....:	1337261						
Aluminum	20100	20.0	mg/kg	SW846 6010B	12/03/01	EPRDF1AE	
		Dilution Factor: 1		Analysis Time...: 17:53	Analyst ID.....: 021088		
		Instrument ID...: M01		MS Run #.....: 1337110	MDL.....: 8.0		
Arsenic	6.4	1.0	mg/kg	SW846 6010B	12/03/01	EPRDF1AF	
		Dilution Factor: 1		Analysis Time...: 17:53	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1337110	MDL.....: 0.40		
Antimony	ND	6.0	mg/kg	SW846 6010B	12/03/01	EPRDF1AG	
		Dilution Factor: 1		Analysis Time...: 17:53	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1337110	MDL.....: 0.60		
Barium	149	2.0	mg/kg	SW846 6010B	12/03/01	EPRDF1AH	
		Dilution Factor: 1		Analysis Time...: 17:53	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1337110	MDL.....: 0.10		
Cadmium	0.16 B,J	0.50	mg/kg	SW846 6010B	12/03/01	EPRDF1AJ	
		Dilution Factor: 1		Analysis Time...: 17:53	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1337110	MDL.....: 0.060		
Chromium	31.5 J	1.0	mg/kg	SW846 6010B	12/03/01	EPRDF1AK	
		Dilution Factor: 1		Analysis Time...: 17:53	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1337110	MDL.....: 0.10		
Beryllium	0.71 J	0.50	mg/kg	SW846 6010B	12/03/01	EPRDF1AL	
		Dilution Factor: 1		Analysis Time...: 17:53	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1337110	MDL.....: 0.050		
Lead	6.0	0.50	mg/kg	SW846 6010B	12/03/01	EPRDF1AM	
		Dilution Factor: 1		Analysis Time...: 17:53	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1337110	MDL.....: 0.30		
Selenium	ND	0.50	mg/kg	SW846 6010B	12/03/01	EPRDF1AN	
		Dilution Factor: 1		Analysis Time...: 17:53	Analyst ID.....: 0210880		
		Instrument ID...: M01		MS Run #.....: 1337110	MDL.....: 0.40		

(Continued on next page)

000013

HALEY & ALDRICH INC

Client Sample ID: 1_VEW_24_113001

TOTAL Metals

Lot-Sample #....: E1K300329-001

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ORDER #
		LIMIT	UNITS					
Silver	ND	1.0	mg/kg		SW846 6010B	12/03/01	EPRDF1AP	
		Dilution Factor: 1			Analysis Time...: 17:53		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1337110		MDL.....: 0.10	
Cobalt	11.3	5.0	mg/kg		SW846 6010B	12/03/01	EPRDF1AQ	
		Dilution Factor: 1			Analysis Time...: 17:53		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1337110		MDL.....: 0.10	
Copper	26.7	2.5	mg/kg		SW846 6010B	12/03/01	EPRDF1AR	
		Dilution Factor: 1			Analysis Time...: 17:53		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1337110		MDL.....: 0.40	
Molybdenum	1.9 B	4.0	mg/kg		SW846 6010B	12/03/01	EPRDF1AT	
		Dilution Factor: 1			Analysis Time...: 17:53		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1337110		MDL.....: 0.30	
Nickel	21.0	4.0	mg/kg		SW846 6010B	12/03/01	EPRDF1AU	
		Dilution Factor: 1			Analysis Time...: 17:53		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1337110		MDL.....: 0.30	
Thallium	ND	1.0	mg/kg		SW846 6010B	12/03/01	EPRDF1AV	
		Dilution Factor: 1			Analysis Time...: 17:53		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1337110		MDL.....: 0.80	
Vanadium	56.8	5.0	mg/kg		SW846 6010B	12/03/01	EPRDF1AW	
		Dilution Factor: 1			Analysis Time...: 17:53		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1337110		MDL.....: 0.10	
Zinc	73.0	2.0	mg/kg		SW846 6010B	12/03/01	EPRDF1AX	
		Dilution Factor: 1			Analysis Time...: 17:53		Analyst ID.....: 0210880	
		Instrument ID...: M01			MS Run #.....: 1337110		MDL.....: 1.0	
Prep Batch #....:	1337296							
Mercury	0.086 B	0.10	mg/kg		SW846 7471A	12/03-12/04/01	EPRDF1AO	
		Dilution Factor: 1			Analysis Time...: 13:37		Analyst ID.....: 0000230	
		Instrument ID...: M04			MS Run #.....: 1337138		MDL.....: 0.020	

NOTE (S) :

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

000014

SEVERN
TRENT
SERVICES

QA/QC

000015

QC DATA ASSOCIATION SUMMARY

E1K300329

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	SW846 3015B		1337324	1337164
	SOLID	SW846 3015B		1338348	1338166
	SOLID	SW846 7471A		1337296	1337138
	SOLID	SW846 3260B		1338327	1338156
	SOLID	SW846 6010B		1337261	1337110
	SOLID	SW846 8310		1337305	1337148

000016

METHOD BLANK REPORT

HPLC

Client Lot #....: E1K300329	Work Order #....: EPTN41AA	Matrix.....: SOLID
MB Lot-Sample #: G1L030000-305		
Analysis Date...: 12/05/01	Prep Date.....: 12/03/01	Analysis Time...: 17:38
Dilution Factor: 1	Prep Batch #: 1337305	Instrument ID...: LC7
		Analyst ID.....: 033077

<u>PARAMETER</u>	REPORTING			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Acenaphthene	ND	400	ug/kg	SW846 8310
Acenaphthylene	ND	200	ug/kg	SW846 8310
Anthracene	ND	8.0	ug/kg	SW846 8310
Benzo(a)anthracene	ND	16	ug/kg	SW846 8310
Benzo(a)pyrene	ND	10	ug/kg	SW846 8310
Benzo(b)fluoranthene	ND	4.0	ug/kg	SW846 8310
Benzo(ghi)perylene	ND	16	ug/kg	SW846 8310
Benzo(k)fluoranthene	ND	4.0	ug/kg	SW846 8310
Chrysene	ND	20	ug/kg	SW846 8310
Dibenz(a,h)anthracene	ND	40	ug/kg	SW846 8310
Fluoranthene	ND	20	ug/kg	SW846 8310
Fluorene	ND	40	ug/kg	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	20	ug/kg	SW846 8310
Naphthalene	ND	200	ug/kg	SW846 8310
Phenanthrene	ND	16	ug/kg	SW846 8310
Pyrene	ND	40	ug/kg	SW846 8310
<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY		
	<u>RECOVERY</u>	<u>LIMITS</u>		
1-Methylnaphthalene	86	(41 - 115)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000017

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: E1K300329 Work Order #...: EPTR51AA Matrix.....: SOLID
MB Lot-Sample #: E1L030000-324
Analysis Date...: 12/04/01 Prep Date.....: 12/03/01 Analysis Time...: 14:04
Dilution Factor: 1 Prep Batch #: 1337324 Instrument ID...: G02
Analyst ID.....: 356074

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
C8-C9	ND	10	mg/kg	SW846 8015B
C10-C11	ND	10	mg/kg	SW846 8015B
C12-C13	ND	10	mg/kg	SW846 8015B
C14-C15	ND	10	mg/kg	SW846 8015B
C16-C17	ND	10	mg/kg	SW846 8015B
C18-C19	ND	10	mg/kg	SW846 8015B
C20-C23	ND	10	mg/kg	SW846 8015B
C24-C27	ND	10	mg/kg	SW846 8015B
C28-C31	ND	10	mg/kg	SW846 8015B
C32-C35	ND	10	mg/kg	SW846 8015B
C36-C39	ND	10	mg/kg	SW846 8015B
C40+	ND	10	mg/kg	SW846 8015B
Total Carbon Chain Range	ND	10	mg/kg	SW846 8015B
SURROGATE	PERCENT	RECOVERY		
		RECOVERY	LIMITS	
Benzo(a)pyrene	85	(60 - 130)		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

The surrogate recoveries for C10-C25-10.654 ppm=85.2%

000018

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: E1K300329	Work Order #....: EPV941AA	Matrix.....: SOLID
MB Lot-Sample #: E1L040000-327		
Analysis Date...: 12/03/01	Prep Date.....: 12/03/01	Analysis Time..: 13:04
Dilution Factor: 1	Prep Batch #: 1338327	Instrument ID.: MSD
		Analyst ID.....: 999998

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Vinyl chloride	ND	10	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
Acrolein	ND	100	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Iodomethane	ND	10	ug/kg	SW846 8260B
Acetone	ND	25	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
Acrylonitrile	ND	100	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Vinyl acetate	ND	10	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	25	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Tetrahydrofuran	ND	20	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
2-Chloroethyl vinyl ether	ND	10	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	25	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	25	ug/kg	SW846 8260B

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000019

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: E1K300329 Work Order #....: EPV941AA Matrix.....: SOLID

<u>PARAMETER</u>	REPORTING			<u>METHOD</u>
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
Styrene	ND	10	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
p-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro-	ND	10	ug/kg	SW846 8260B
propane				
1,2,4-Trichloro-	ND	5.0	ug/kg	SW846 8260B
benzene				
Hexachlorobutadiene	ND	5.0	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	SW846 8260B
t-Butanol	ND	100	ug/kg	SW846 8260B
Isopropyl ether	ND	10	ug/kg	SW846 8260B
Tert-amyl methyl ether	ND	10	ug/kg	SW846 8260B
Tert-butyl ethyl ether	ND	10	ug/kg	SW846 8260B
<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY		
	<u>RECOVERY</u>	LIMITS		
Bromofluorobenzene	77	(65 - 135)		
1,2-Dichloroethane-d4	100	(60 - 140)		
Toluene-d8	82	(70 - 130)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000020

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E1K300329 Work Order #...: EPWKK1AA Matrix.....: SOLID
MB Lot-Sample #: E1L040000-348

Analysis Date...: 12/03/01 Prep Date.....: 12/03/01 Analysis Time...: 23:53
Dilution Factor: 1 Prep Batch #: 1338348 Instrument ID...: G15

Analyst ID.....: 001464

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING			<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>		
C6-C8	ND	1.0	mg/kg		SW846 8015B
SURROGATE	PERCENT	RECOVERY	LIMITS		
a,a,a-Trifluorotoluene (TFT)	RECOVERY 84		(60 - 130)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000021

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: E1K300329

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: E1L030000-261 Prep Batch #...: 1337261						
Aluminum	ND	20.0	mg/kg	SW846 6010B	12/03/01	EPTJW1AN
		Dilution Factor: 1				
		Analysis Time...: 17:02		Analyst ID.....: 021088	Instrument ID...: M01	
Arsenic	ND	1.0	mg/kg	SW846 6010B	12/03/01	EPTJW1AP
		Dilution Factor: 1				
		Analysis Time...: 17:02		Analyst ID.....: 021088	Instrument ID...: M01	
Antimony	ND	6.0	mg/kg	SW846 6010B	12/03/01	EPTJW1AO
		Dilution Factor: 1				
		Analysis Time...: 17:02		Analyst ID.....: 021088	Instrument ID...: M01	
Barium	ND	2.0	mg/kg	SW846 6010B	12/03/01	EPTJW1AQ
		Dilution Factor: 1				
		Analysis Time...: 17:02		Analyst ID.....: 021088	Instrument ID...: M01	
Cadmium	0.10 B	0.50	mg/kg	SW846 6010B	12/03/01	EPTJW1AV
		Dilution Factor: 1				
		Analysis Time...: 17:02		Analyst ID.....: 021088	Instrument ID...: M01	
Chromium	0.12 B	1.0	mg/kg	SW846 6010B	12/03/01	EPTJW1AX
		Dilution Factor: 1				
		Analysis Time...: 17:02		Analyst ID.....: 021088	Instrument ID...: M01	
Beryllium	0.098 B	0.50	mg/kg	SW846 6010B	12/03/01	EPTJW1AR
		Dilution Factor: 1				
		Analysis Time...: 17:02		Analyst ID.....: 021088	Instrument ID...: M01	
Lead	ND	0.50	mg/kg	SW846 6010B	12/03/01	EPTJW1AL
		Dilution Factor: 1				
		Analysis Time...: 17:02		Analyst ID.....: 021088	Instrument ID...: M01	
Selenium	ND	0.50	mg/kg	SW846 6010B	12/03/01	EPTJW1A1
		Dilution Factor: 1				
		Analysis Time...: 17:02		Analyst ID.....: 021088	Instrument ID...: M01	
Silver	ND	1.0	mg/kg	SW846 6010B	12/03/01	EPTJW1AM
		Dilution Factor: 1				
		Analysis Time...: 17:02		Analyst ID.....: 021088	Instrument ID...: M01	
Cobalt	ND	5.0	mg/kg	SW846 6010B	12/03/01	EPTJW1AW
		Dilution Factor: 1				
		Analysis Time...: 17:02		Analyst ID.....: 021088	Instrument ID...: M01	

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000022

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: E1K300329

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING			<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK ORDER #</u>
		<u>LIMIT</u>	<u>UNITS</u>				
Copper	ND	2.5	mg/kg		SW846 6010B	12/03/01	EPTJW1AA
		Dilution Factor: 1					
		Analysis Time...: 17:02			Analyst ID.....: 021088	Instrument ID...: M01	
Molybdenum	ND	4.0	mg/kg		SW846 6010B	12/03/01	EPTJW1AH
		Dilution Factor: 1					
		Analysis Time...: 17:02			Analyst ID.....: 021088	Instrument ID...: M01	
Nickel	ND	4.0	mg/kg		SW846 6010B	12/03/01	EPTJW1AK
		Dilution Factor: 1					
		Analysis Time...: 17:02			Analyst ID.....: 021088	Instrument ID...: M01	
Thallium	ND	1.0	mg/kg		SW846 6010B	12/03/01	EPTJW1A5
		Dilution Factor: 1					
		Analysis Time...: 17:02			Analyst ID.....: 021088	Instrument ID...: M01	
Vanadium	ND	5.0	mg/kg		SW846 6010B	12/03/01	EPTJW1A6
		Dilution Factor: 1					
		Analysis Time...: 17:02			Analyst ID.....: 021088	Instrument ID...: M01	
Zinc	ND	2.0	mg/kg		SW846 6010B	12/03/01	EPTJW1A7
		Dilution Factor: 1					
		Analysis Time...: 17:02			Analyst ID.....: 021088	Instrument ID...: M01	

MB Lot-Sample #: E1L030000-296 Prep Batch #...: 1337296

Mercury	ND	0.10	mg/kg	SW846 7471A	12/03-12/04/01	EPTNH1AA
		Dilution Factor: 1				
		Analysis Time...: 13:34		Analyst ID.....: 000023	Instrument ID...: M04	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

000023

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #....: E1K300329 Work Order #....: EPTN41AC Matrix.....: SOLID
 LCS Lot-Sample#: G1L030000-305
 Prep Date.....: 12/03/01 Analysis Date...: 12/05/01
 Prep Batch #....: 1337305 Analysis Time...: 18:12
 Dilution Factor: 1 Instrument ID...: LC7
 Analyst ID.....: 033077

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>		
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>	<u>METHOD</u>
Acenaphthene	1330	1150	ug/kg	86	SW846 8310
Acenaphthylene	667	603	ug/kg	90	SW846 8310
Anthracene	26.6	20.4	ug/kg	77	SW846 8310
Benzo (a) anthracene	66.7	62.3	ug/kg	93	SW846 8310
Benzo (a) pyrene	66.7	58.8	ug/kg	88	SW846 8310
Benzo (b) fluoranthene	26.6	22.5	ug/kg	85	SW846 8310
Benzo (ghi) perylene	106	92.9	ug/kg	87	SW846 8310
Benzo (k) fluoranthene	26.6	24.5	ug/kg	92	SW846 8310
Chrysene	66.7	61.8	ug/kg	93	SW846 8310
Dibenz (a, h) anthracene	266	213	ug/kg	80	SW846 8310
Fluoranthene	66.7	54.0	ug/kg	81	SW846 8310
Fluorene	133	86.7	ug/kg	65	SW846 8310
Indeno (1, 2, 3-cd) pyrene	66.7	60.8	ug/kg	91	SW846 8310
Naphthalene	667	565	ug/kg	85	SW846 8310
Phenanthrene	53.2	39.5	ug/kg	74	SW846 8310
Pyrene	133	115	ug/kg	86	SW846 8310
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>		
1-Methylnaphthalene		<u>RECOVERY</u>	<u>LIMITS</u>		
		97	(41 - 115)		

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000024

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1K300329 **Work Order #....:** EPTR51AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1L030000-324
Prep Date.....: 12/03/01 **Analysis Date...:** 12/04/01
Prep Batch #....: 1337324 **Analysis Time...:** 14:43
Dilution Factor: 1 **Instrument ID...:** G02
Analyst ID.....: 356074

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	
TPH (as Diesel)	250	190	76	SW846 8015B
Diesel Range Organics (C10-C25)	250	188	75	SW846 8015B
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
Benzo (a) pyrene		<u>RECOVERY</u>	<u>LIMITS</u>	
		80	(60 ~ 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

The surrogate recoveries for C10-C25-9.9556 ppm=79.65%

000025

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E1K300329 Work Order #....: EPV941AC Matrix.....: SOLID
 LCS Lot-Sample#: E1L040000-327
 Prep Date.....: 12/03/01 Analysis Date...: 12/03/01
 Prep Batch #: 1338327 Analysis Time..: 12:33
 Dilution Factor: 1 Instrument ID.: MSD
 Analyst ID.....: 999998

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>
1,1-Dichloroethene	50.0	63.7	ug/kg	127
Benzene	50.0	62.6	ug/kg	125
Trichloroethene	50.0	61.9	ug/kg	124
Toluene	50.0	44.9	ug/kg	90
Chlorobenzene	50.0	45.9	ug/kg	92

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	81	(65 - 135)
1,2-Dichloroethane-d4	113	(60 - 140)
Toluene-d8	84	(70 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000026

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: E1K300329 **Work Order #....:** EPWKK1AC **Matrix.....:** SOLID
LCS Lot-Sample#: E1L040000-348
Prep Date.....: 12/04/01 **Analysis Date..:** 12/04/01
Prep Batch #....: 1338348 **Analysis Time..:** 00:20
Dilution Factor: 1 **Instrument ID..:** G15
Analyst ID.....: 001464

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	
TPH (as Gasoline)	5.00	4.86	97	SW846 8015B
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
a,a,a-Trifluorotoluene (TFT)		<u>RECOVERY</u>	<u>LIMITS</u>	
		111	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000027

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1K300329

Matrix.....: SOLID

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCNT RECVRY</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: E1L030000-261 Prep Batch #...: 1337261							
Aluminum	200	190	mg/kg	95	SW846 6010B	12/03/01	EPTJW1CL
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Arsenic	200	197	mg/kg	98	SW846 6010B	12/03/01	EPTJW1CM
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Antimony	50.0	43.7	mg/kg	87	SW846 6010B	12/03/01	EPTJW1CW
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Barium	200	192	mg/kg	96	SW846 6010B	12/03/01	EPTJW1CN
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Cadmium	5.00	4.98	mg/kg	100	SW846 6010B	12/03/01	EPTJW1CT
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Chromium	20.0	21.3	mg/kg	106	SW846 6010B	12/03/01	EPTJW1CV
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Beryllium	5.00	5.45	mg/kg	109	SW846 6010B	12/03/01	EPTJW1CP
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Lead	50.0	48.1	mg/kg	96	SW846 6010B	12/03/01	EPTJW1CJ
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Selenium	200	182	mg/kg	91	SW846 6010B	12/03/01	EPTJW1CX
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Silver	5.00	4.67	mg/kg	93	SW846 6010B	12/03/01	EPTJW1CK
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	

(Continued on next page)

000028

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1K300329						Matrix.....: SOLID	
PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Cobalt	50.0	50.7	mg/kg	101	SW846 6010B	12/03/01	EPTJW1CU
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Copper	25.0	23.6	mg/kg	94	SW846 6010B	12/03/01	EPTJW1A8
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Molybdenum	100	101	mg/kg	101	SW846 6010B	12/03/01	EPTJW1CF
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Nickel	50.0	50.2	mg/kg	100	SW846 6010B	12/03/01	EPTJW1CH
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Thallium	200	195	mg/kg	98	SW846 6010B	12/03/01	EPTJW1C3
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Vanadium	50.0	51.4	mg/kg	103	SW846 6010B	12/03/01	EPTJW1C4
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
Zinc	50.0	52.4	mg/kg	105	SW846 6010B	12/03/01	EPTJW1C5
			Dilution Factor: 1				
			Analysis Time...: 17:07		Analyst ID.....: 021088	Instrument ID...: M01	
LCS Lot-Sample#: E1L030000-296 Prep Batch #...: 1337296							
Mercury	0.833	0.782	mg/kg	94	SW846 7471A	12/03-12/04/01	EPTNH1AC
			Dilution Factor: 1				
			Analysis Time...: 13:36		Analyst ID.....: 000023	Instrument ID...: M04	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000029

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #....: E1K300329 **Work Order #....:** EPTN41AC **Matrix.....:** SOLID
LCS Lot-Sample#: G1L030000-305
Prep Date.....: 12/03/01 **Analysis Date..:** 12/05/01
Prep Batch #....: 1337305 **Analysis Time..:** 18:12
Dilution Factor: 1 **Instrument ID..:** LC7
Analyst ID.....: 033077

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Acenaphthene	86	(50 - 150)	SW846 8310
Acenaphthylene	90	(50 - 150)	SW846 8310
Anthracene	77	(50 - 150)	SW846 8310
Benzo (a) anthracene	93	(50 - 150)	SW846 8310
Benzo (a)pyrene	88	(49 - 107)	SW846 8310
Benzo (b) fluoranthene	85	(50 - 150)	SW846 8310
Benzo (ghi)perylene	87	(50 - 150)	SW846 8310
Benzo (k) fluoranthene	92	(50 - 150)	SW846 8310
Chrysene	93	(50 - 150)	SW846 8310
Dibenz (a, h) anthracene	80	(50 - 150)	SW846 8310
Fluoranthene	81	(50 - 150)	SW846 8310
Fluorene	65	(43 - 112)	SW846 8310
Indeno(1, 2, 3-cc)pyrene	91	(54 - 114)	SW846 8310
Naphthalene	85	(44 - 110)	SW846 8310
Phenanthrene	74	(50 - 150)	SW846 8310
Pyrene	86	(49 - 115)	SW846 8310
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
1-Methylnaphthalene	97	(41 - 115)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000030

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: E1K300329 Work Order #...: EPTR51AC Matrix.....: SOLID
LCS Lot-Sample#: E1L030000-324
Prep Date.....: 12/03/01 Analysis Date...: 12/04/01
Prep Batch #...: 1337324 Analysis Time...: 14:43
Dilution Factor: 1 Instrument ID...: G02
Analyst ID.....: 356074

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
<u>RECOVERY</u>	<u>LIMITS</u>		
TPH (as Diesel)	76	(55 - 130)	SW846 8015B
Diesel Range Organics (C10-C25)	75	(55 - 130)	SW846 8015B
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
	<u>RECOVERY</u>	<u>LIMITS</u>	
Benzo (a) pyrene	80	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

The surrogate recoveries for C10-C25-9.9556 ppm=79.65%

000031

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....:	E1K300329	Work Order #....:	EPV941AC	Matrix.....:	SOLID
LCS Lot-Sample#:	E1L040000-327				
Prep Date.....:	12/03/01	Analysis Date..:	12/03/01		
Prep Batch #....:	1338327	Analysis Time..:	12:33		
Dilution Factor:	1	Instrument ID..:	MSD		
Analyst ID.....:	999998				

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
1,1-Dichloroethene	127	(65 - 150)	SW846 8260B
Benzene	125	(70 - 130)	SW846 8260B
Trichloroethene	124	(70 - 135)	SW846 8260B
Toluene	90	(70 - 130)	SW846 8260B
Chlorobenzene	92	(70 - 130)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
Bromofluorobenzene	81	(65 - 135)	
1,2-Dichloroethane-d4	113	(60 - 140)	
Toluene-d8	84	(70 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000032

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E1K300329 Work Order #...: EPWKK1AC Matrix.....: SOLID
LCS Lot-Sample#: E1L040000-348
Prep Date.....: 12/04/01 Analysis Date...: 12/04/01
Prep Batch #:...: 1338348 Analysis Time...: 00:20
Dilution Factor: 1 Instrument ID...: G15
Analyst ID.....: 001464

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
<u>PARAMETER</u>	<u>RECOVERY</u>	<u>LIMITS</u>	<u>METHOD</u>
TPH (as Gasoline)	97	(70 - 140)	SW846 8015B
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
a,a,a-Trifluorotoluene (TFT)	111	(60 - 130)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000033

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1K300329

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: E1L030000-261 Prep Batch #...: 1337261					
Aluminum	95	(70 - 115)	SW846 6010B Dilution Factor: 1 Analysis Time...: 17:07	12/03/01	EPTJW1CL Instrument ID...: M01
Arsenic	98	(75 - 115)	SW846 6010B Dilution Factor: 1 Analysis Time...: 17:07	12/03/01	EPTJW1CM Instrument ID...: M01
Antimony	87	(75 - 115)	SW846 6010B Dilution Factor: 1 Analysis Time...: 17:07	12/03/01	EPTJW1CW Instrument ID...: M01
Barium	96	(80 ~ 120)	SW846 6010B Dilution Factor: 1 Analysis Time...: 17:07	12/03/01	EPTJW1CN Instrument ID...: M01
Cadmium	100	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time...: 17:07	12/03/01	EPTJW1CT Instrument ID...: M01
Chromium	106	(85 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time...: 17:07	12/03/01	EPTJW1CV Instrument ID...: M01
Beryllium	109	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time...: 17:07	12/03/01	EPTJW1CP Instrument ID...: M01
Lead	96	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time...: 17:07	12/03/01	EPTJW1CJ Instrument ID...: M01
Selenium	91	(70 - 115)	SW846 6010B Dilution Factor: 1 Analysis Time...: 17:07	12/03/01	EPTJW1CX Instrument ID...: M01
Silver	93	(80 - 120)	SW846 6010B Dilution Factor: 1 Analysis Time...: 17:07	12/03/01	EPTJW1CK Instrument ID...: M01

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000034

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1K300329

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Cobalt	101	(80 - 120)	SW846 6010B	12/03/01	EPTJW1CU
		Dilution Factor: 1			
		Analysis Time...: 17:07	Analyst ID.....: 021088		Instrument ID...: M01
Copper	94	(80 - 120)	SW846 6010B	12/03/01	EPTJW1A8
		Dilution Factor: 1			
		Analysis Time...: 17:07	Analyst ID.....: 021088		Instrument ID...: M01
Molybdenum	101	(80 - 120)	SW846 6010B	12/03/01	EPTJW1CF
		Dilution Factor: 1			
		Analysis Time...: 17:07	Analyst ID.....: 021088		Instrument ID...: M01
Nickel	100	(80 - 120)	SW846 6010B	12/03/01	EPTJW1CH
		Dilution Factor: 1			
		Analysis Time...: 17:07	Analyst ID.....: 021088		Instrument ID...: M01
Thallium	98	(75 - 125)	SW846 6010B	12/03/01	EPTJW1C3
		Dilution Factor: 1			
		Analysis Time...: 17:07	Analyst ID.....: 021088		Instrument ID...: M01
Vanadium	103	(80 - 120)	SW846 6010B	12/03/01	EPTJW1C4
		Dilution Factor: 1			
		Analysis Time...: 17:07	Analyst ID.....: 021088		Instrument ID...: M01
Zinc	105	(80 - 120)	SW846 6010B	12/03/01	EPTJW1CS
		Dilution Factor: 1			
		Analysis Time...: 17:07	Analyst ID.....: 021088		Instrument ID...: M01
LCS Lot-Sample#:	E1L030000-296	Prep Batch #....:	1337296		
Mercury	94	(85 - 115)	SW846 7471A	12/03-12/04/01	EPTNH1AC
		Dilution Factor: 1			
		Analysis Time...: 13:36	Analyst ID.....: 000023		Instrument ID...: M04

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000035

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1K300329 Matrix.....: SOLID
 Date Sampled...: 11/28/01 08:30 Date Received..: 11/30/01 09:30

PARAMETER	SAMPLE SPIKE MEASURED			PERCNT			PREPARATION-	WORK	ANALYSIS DATE	ORDER #				
	AMOUNT	AMT	UNITS	RECVRY	RPD	METHOD								
MS Lot-Sample #: E1K300198-001 Prep Batch #: 1337261														
Aluminum														
726	200	1230	N mg/kg	250		SW846 6010B	12/03/01	EPP691DK						
726	200	1100	N mg/kg	187	11	SW846 6010B	12/03/01	EPP691DL						
			Dilution Factor: 1											
			Analysis Time...: 19:13			Instrument ID...: M01				Analyst ID.....: 021088				
			MS Run #.....: 1337110											
Arsenic														
8.8	200	164	mg/kg	78		SW846 6010B	12/03/01	EPP691DM						
8.8	200	165	mg/kg	78	0.70	SW846 6010B	12/03/01	EPP691DN						
			Dilution Factor: 1											
			Analysis Time...: 19:13			Instrument ID...: M01				Analyst ID.....: 021088				
			MS Run #.....: 1337110											
Antimony														
ND	50.0	30.4	N mg/kg	61		SW846 6010B	12/03/01	EPP691D6						
ND	50.0	30.6	N mg/kg	61	0.85	SW846 6010B	12/03/01	EPP691D7						
			Dilution Factor: 1											
			Analysis Time...: 19:13			Instrument ID...: M01				Analyst ID.....: 021088				
			MS Run #.....: 1337110											
Barium														
172	200	330	N mg/kg	79		SW846 6010B	12/03/01	EPP691DP						
172	200	341	mg/kg	84	3.3	SW846 6010B	12/03/01	EPP691DQ						
			Dilution Factor: 1											
			Analysis Time...: 19:13			Instrument ID...: M01				Analyst ID.....: 021088				
			MS Run #.....: 1337110											
Cadmium														
ND	5.00	4.62	mg/kg	92		SW846 6010B	12/03/01	EPP691D0						
ND	5.00	4.60	mg/kg	92	0.45	SW846 6010B	12/03/01	EPP691D1						
			Dilution Factor: 1											
			Analysis Time...: 19:13			Instrument ID...: M01				Analyst ID.....: 021088				
			MS Run #.....: 1337110											
Chromium														
63.0	20.0	80.8	mg/kg	89		SW846 6010B	12/03/01	EPP691D4						
63.0	20.0	74.6	N mg/kg	58	8.0	SW846 6010B	12/03/01	EPP691D5						
			Dilution Factor: 1											
			Analysis Time...: 19:13			Instrument ID...: M01				Analyst ID.....: 021088				
			MS Run #.....: 1337110											

(Continued on next page)

000036

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1K300329

Matrix.....: SOLID

Date Sampled...: 11/28/01 08:30 Date Received..: 11/30/01 09:30

PARAMETER	SAMPLE SPIKE MEASURED			PERCNT			PREPARATION-	WORK	
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD			
Beryllium									
	ND	5.00	4.49	mg/kg	90		SW846 6010B	12/03/01	EPP691DR
	ND	5.00	4.42	mg/kg	88	1.6	SW846 6010B	12/03/01	EPP691DT
	Dilution Factor: 1								
	Analysis Time...: 19:13 Instrument ID...: M01								
	MS Run #.....: 1337110								
Lead									
	42.7	50.0	81.6	N	mg/kg	78	SW846 6010B	12/03/01	EPP691DF
	42.7	50.0	81.4	N	mg/kg	77	0.32 SW846 6010B	12/03/01	EPP691DG
	Dilution Factor: 1								
	Analysis Time...: 19:13 Instrument ID...: M01								
	MS Run #.....: 1337110								
Selenium									
	1.1	200	123	N	mg/kg	61	SW846 6010B	12/03/01	EPP691D8
	1.1	200	124	N	mg/kg	61	0.51 SW846 6010B	12/03/01	EPP691D9
	Dilution Factor: 1								
	Analysis Time...: 19:13 Instrument ID...: M01								
	MS Run #.....: 1337110								
Silver									
	11.6	5.00	32.8	N	mg/kg	424	SW846 6010B	12/03/01	EPP691DH
	11.6	5.00	33.4	N	mg/kg	436	1.8 SW846 6010B	12/03/01	EPP691DJ
	Dilution Factor: 1								
	Analysis Time...: 19:13 Instrument ID...: M01								
	MS Run #.....: 1337110								
Cobalt									
	6.6	50.0	51.8		mg/kg	90	SW846 6010B	12/03/01	EPP691D2
	6.6	50.0	51.7		mg/kg	90	0.07 SW846 6010B	12/03/01	EPP691D3
	Dilution Factor: 1								
	Analysis Time...: 19:13 Instrument ID...: M01								
	MS Run #.....: 1337110								
Copper									
	1950	25.0	2440	NC	mg/kg		SW846 6010B	12/03/01	EPP691CU
	1950	25.0	1800	NC	mg/kg		SW846 6010B	12/03/01	EPP691CV
	Dilution Factor: 1								
	Analysis Time...: 19:13 Instrument ID...: M01								
	MS Run #.....: 1337110								

(Continued on next page)

000037

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: E1K300329

Matrix.....: SOLID

Date Sampled...: 11/28/01 08:30 Date Received..: 11/30/01 09:30

PARAMETER	SAMPLE SPIKE MEASURED			PERCENT			PREPARATION- ANALYSIS DATE	WORK ORDER #
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD	
Molybdenum								
	11.7	100	95.5	mg/kg	84		SW846 6010B	12/03/01 EPP691C8
	11.7	100	95.5	mg/kg	84	0.05	SW846 6010B	12/03/01 EPP691C9
	Dilution Factor: 1							
	Analysis Time...: 19:13 Instrument ID...: M01							
	MS Run #.....: 1337110							
Nickel								
	480	50.0	496	NC mg/kg			SW846 6010B	12/03/01 EPP691DD
	480	50.0	498	NC mg/kg			SW846 6010B	12/03/01 EPP691DE
	Dilution Factor: 1							
	Analysis Time...: 19:13 Instrument ID...: M01							
	MS Run #.....: 1337110							
Thallium								
	ND	200	176	mg/kg	88		SW846 6010B	12/03/01 EPP691EH
	ND	200	177	mg/kg	88	0.36	SW846 6010B	12/03/01 EPP691EJ
	Dilution Factor: 1							
	Analysis Time...: 19:13 Instrument ID...: M01							
	MS Run #.....: 1337110							
Vanadium								
	67.0	50.0	111	mg/kg	87		SW846 6010B	12/03/01 EPP691EK
	67.0	50.0	117	mg/kg	100	5.6	SW846 6010B	12/03/01 EPP691EL
	Dilution Factor: 1							
	Analysis Time...: 19:13 Instrument ID...: M01							
	MS Run #.....: 1337110							
Zinc								
	238	50.0	272	NC mg/kg			SW846 6010B	12/03/01 EPP691EM
	238	50.0	261	NC mg/kg			SW846 6010B	12/03/01 EPP691EN
	Dilution Factor: 1							
	Analysis Time...: 19:13 Instrument ID...: M01							
	MS Run #.....: 1337110							

MS Lot-Sample #: E1K300198-001 Prep Batch #....: 1337296

Mercury

0.052	0.167	0.0572	N mg/kg	3.1		SW846 7471A	12/03-12/04/01	EPP691EP
0.052	0.167	0.0467	mg/kg	0.0	200	SW846 7471A	12/03-12/04/01	EPP691EQ
Qualifiers: N,*								
Dilution Factor: 1								
Analysis Time...: 13:56 Instrument ID...: M04								Analyst ID.....: 000023
MS Run #.....: 1337138								

(Continued on next page)

000038

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #....: E1K300329

Matrix.....: SOLID

Date Sampled....: 11/28/01 08:30 Date Received..: 11/30/01 09:30

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

000039

MATRIX SPIKE SAMPLE DATA REPORT

HPLC

Client Lot #....: E1K300329 Work Order #....: EPRDF1A2-MS Matrix.....: SOLID
 MS Lot-Sample #: E1K300329-001 EPRDF1A3-MSD
 Date Sampled...: 11/30/01 14:00 Date Received..: 11/30/01 16:50 MS Run #.....: 1337148
 Prep Date.....: 12/03/01 Analysis Date..: 12/05/01
 Prep Batch #....: 1337305 Analysis Time..: 19:21
 Dilution Factor: 1 Analyst ID.....: 033077 Instrument ID.: LC7

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		METHOD
	AMOUNT	AMT [*]	AMOUNT		RECOVERY	RPD	
Acenaphthene	ND	1330	1080	ug/kg	82		SW846 8310
	ND	1330	1040	ug/kg	78	4.1	SW846 8310
Acenaphthylene	ND	667	569	ug/kg	85		SW846 8310
	ND	667	557	ug/kg	84	2.0	SW846 8310
Anthracene	ND	26.6	22.1	ug/kg	83		SW846 8310
	ND	26.6	21.0	ug/kg	79	5.5	SW846 8310
Benzo (a) anthracene	ND	66.7	62.3	ug/kg	93		SW846 8310
	ND	66.7	56.9	ug/kg	85	9.1	SW846 8310
Benzo (a)pyrene	ND	66.7	58.5	ug/kg	88		SW846 8310
	ND	66.7	53.3	ug/kg	80	9.3	SW846 8310
Benzo (b)fluoranthene	ND	26.6	22.5	ug/kg	85		SW846 8310
	ND	26.6	20.7	ug/kg	78	8.3	SW846 8310
Benzo (ghi)perylene	ND	106	104	ug/kg	97		SW846 8310
	ND	106	94.8	ug/kg	89	8.8	SW846 8310
Benzo (k)fluoranthene	ND	26.6	24.0	ug/kg	90		SW846 8310
	ND	26.6	21.8	ug/kg	82	9.4	SW846 8310
Chrysene	ND	66.7	62.5	ug/kg	94		SW846 8310
	ND	66.7	56.9	ug/kg	85	9.4	SW846 8310
Dibenz (a, h)anthracene	ND	266	214	ug/kg	81		SW846 8310
	ND	266	194	ug/kg	73	10	SW846 8310
Fluoranthene	ND	66.7	59.5	ug/kg	89		SW846 8310
	ND	66.7	54.4	ug/kg	82	8.9	SW846 8310
Fluorene	ND	133	111	ug/kg	84		SW846 8310
	ND	133	107	ug/kg	80	4.3	SW846 8310
Indeno (1, 2, 3-cd)pyrene	ND	66.7	62.7	ug/kg	94		SW846 8310
	ND	66.7	56.2	ug/kg	84	11	SW846 8310
Naphthalene	ND	667	529	ug/kg	79		SW846 8310
	ND	667	519	ug/kg	78	1.9	SW846 8310
Phenanthrene	ND	53.2	46.2	ug/kg	87		SW846 8310
	ND	53.2	43.0	ug/kg	81	7.1	SW846 8310
Pyrene	ND	133	119	ug/kg	90		SW846 8310
	ND	133	110	ug/kg	83	8.1	SW846 8310

SURROGATE	PERCENT	RECOVERY	LIMITS
	RECOVERY	(41 - 115)	
1-Methylnaphthalene	85		(41 - 115)
	81		(41 - 115)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000040

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: E1K300329 Work Order #....: EPRDF1A4-MS Matrix.....: SOLID
 MS Lot-Sample #: E1K300329-001 EPRDF1A5-MSD
 Date Sampled....: 11/30/01 14:00 Date Received...: 11/30/01 16:50 MS Run #.....: 1337164
 Prep Date.....: 12/03/01 Analysis Date...: 12/04/01
 Prep Batch #....: 1337324 Analysis Time...: 16:01
 Dilution Factor: 1 Analyst ID.....: 356074 Instrument ID...: G02

<u>PARAMETER</u>	<u>SAMPLE</u>	<u>SPIKE</u>	<u>MEASRD</u>	<u>PERCENT</u>			
	<u>AMOUNT</u>	<u>AMT¹</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
TPH (as Diesel)	ND	250	205	mg/kg	82		SW846 8015B
	ND	250	201	mg/kg	80	2.2	SW846 8015B
<u>SURROGATE</u>				<u>PERCENT</u>	<u>RECOVERY</u>		
Benzo(a)pyrene				<u>RECOVERY</u>	<u>LIMITS</u>		
				85	(60 - 130)		
				86	(60 - 130)		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000041

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E1K300329 Work Order #....: EPRDF1A6-MS Matrix.....: SOLID
 MS Lot-Sample #: E1K300329-001 EPRDF1A7-MSD
 Date Sampled...: 11/30/01 14:00 Date Received..: 11/30/01 16:50 MS Run #.....: 1338156
 Prep Date.....: 12/03/01 Analysis Date...: 12/03/01
 Prep Batch #....: 1338327 Analysis Time...: 16:36
 Dilution Factor: 1 Analyst ID.....: 999998 Instrument ID...: MSD

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCENT			
	AMOUNT	AMT'	AMOUNT	UNITS	RECOVERY	RPD	METHOD
1,1-Dichloroethene	ND	50.0	60.8	ug/kg	122		SW846 8260B
	ND	50.0	61.2	ug/kg	122	0.64	SW846 8260B
Benzene	ND	50.0	60.2	ug/kg	120		SW846 8260B
	ND	50.0	60.1	ug/kg	120	0.13	SW846 8260B
Trichloroethene	ND	50.0	61.9	ug/kg	124		SW846 8260B
	ND	50.0	61.2	ug/kg	122	1.1	SW846 8260B
Toluene	ND	50.0	44.0	ug/kg	88		SW846 8260B
	ND	50.0	43.7	ug/kg	87	0.61	SW846 8260B
Chlorobenzene	ND	50.0	43.7	ug/kg	87		SW846 8260B
	ND	50.0	43.2	ug/kg	86	0.96	SW846 8260B

<u>SURROGATE</u>	PERCENT		RECOVERY
	RECOVERY	LIMITS	
Bromofluorobenzene	78	(65 - 135)	
	81	(65 - 135)	
1,2-Dichloroethane-d4	107	(60 - 140)	
	108	(60 - 140)	
Toluene-d8	84	(70 - 130)	
	84	(70 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.
Bold print denotes control parameters

000042

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: E1K300329 Work Order #....: EPRDF1A8-MS Matrix.....: SOLID
 MS Lot-Sample #: E1K300329-001 EPRDF1A9-MSD
 Date Sampled...: 11/30/01 14:00 Date Received...: 11/30/01 16:50 MS Run #.....: 1338166
 Prep Date.....: 12/04/01 Analysis Date...: 12/04/01
 Prep Batch #....: 1338348 Analysis Time...: 02:08
 Dilution Factor: 1 Analyst ID....: 001464 Instrument ID.: G15

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCENT		METHOD
	AMOUNT	AMT	AMOUNT		RECOVERY	RPD	
TPH (as Gasoline)	ND	5.00	5.05	mg/kg	101		SW846 8015B
	ND	5.00	4.82	mg/kg	96	4.7	SW846 8015B
<u>SURROGATE</u>				PERCENT		RECOVERY	
a,a,a-Trifluorotoluene (TFT)				RECOVERY		LIMITS	
			124			(60 - 130)	
			112			(60 - 130)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000043

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1K300329

Matrix.....: SOLID

Date Sampled....: 11/28/01 08:30 Date Received..: 11/30/01 09:30

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
MS Lot-Sample #: E1K300198-001 Prep Batch #...: 1337261							
Aluminum	250 N	(70 - 115)			SW846 6010B	12/03/01	EPP691DK
	187 N	(70 - 115) 11	(0-25)		SW846 6010B	12/03/01	EPP691DL
Dilution Factor: 1 Analysis Time...: 19:13 Instrument ID...: M01 Analyst ID.....: 021088 MS Run #.....: 1337110							
Arsenic	78	(75 - 115)			SW846 6010B	12/03/01	EPP691DM
	78	(75 - 115) 0.70	(0-25)		SW846 6010B	12/03/01	EPP691DN
Dilution Factor: 1 Analysis Time...: 19:13 Instrument ID...: M01 Analyst ID.....: 021088 MS Run #.....: 1337110							
Antimony	61 N	(75 - 115)			SW846 6010B	12/03/01	EPP691D6
	61 N	(75 - 115) 0.85	(0-25)		SW846 6010B	12/03/01	EPP691D7
Dilution Factor: 1 Analysis Time...: 19:13 Instrument ID...: M01 Analyst ID.....: 021088 MS Run #.....: 1337110							
Barium	79 N	(80 - 120)			SW846 6010B	12/03/01	EPP691DP
	84	(80 - 120) 3.3	(0-25)		SW846 6010B	12/03/01	EPP691DQ
Dilution Factor: 1 Analysis Time...: 19:13 Instrument ID...: M01 Analyst ID.....: 021088 MS Run #.....: 1337110							
Cadmium	92	(80 - 120)			SW846 6010B	12/03/01	EPP691D0
	92	(80 - 120) 0.45	(0-25)		SW846 6010B	12/03/01	EPP691D1
Dilution Factor: 1 Analysis Time...: 19:13 Instrument ID...: M01 Analyst ID.....: 021088 MS Run #.....: 1337110							
Chromium	89	(85 - 120)			SW846 6010B	12/03/01	EPP691D4
	58 N	(85 - 120) 8.0	(0-25)		SW846 6010B	12/03/01	EPP691D5
Dilution Factor: 1 Analysis Time...: 19:13 Instrument ID...: M01 Analyst ID.....: 021088 MS Run #.....: 1337110							
Beryllium	90	(80 - 120)			SW846 6010B	12/03/01	EPP691DR
	88	(80 - 120) 1.6	(0-25)		SW846 6010B	12/03/01	EPP691DT
Dilution Factor: 1 Analysis Time...: 19:13 Instrument ID...: M01 Analyst ID.....: 021088 MS Run #.....: 1337110							

(Continued on next page)

000044

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1K300329		Matrix.....: SOLID						
Date Sampled....: 11/28/01 08:30 Date Received..: 11/30/01 09:30								
<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>PREPARATION-</u>	<u>WORK</u>			
		<u>RECOVERY</u>	<u>LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>	<u>ANALYSIS DATE</u>	<u>ORDER #</u>
Lead	78 N	(80 - 120)		SW846	6010B		12/03/01	EPP691DF
	77 N	(80 - 120)	0.32 (0-25)	SW846	6010B		12/03/01	EPP691DG
			Dilution Factor: 1					
				Analysis Time...: 19:13	Instrument ID...: M01		Analyst ID.....: 021088	
					MS Run #.....: 1337110			
Selenium	61 N	(70 - 115)		SW846	6010B		12/03/01	EPP691D8
	61 N	(70 - 115)	0.51 (0-25)	SW846	6010B		12/03/01	EPP691D9
			Dilution Factor: 1					
				Analysis Time...: 19:13	Instrument ID...: M01		Analyst ID.....: 021088	
					MS Run #.....: 1337110			
Silver	424 N	(80 - 120)		SW846	6010B		12/03/01	EPP691DH
	436 N	(80 - 120)	1.8 (0-25)	SW846	6010B		12/03/01	EPP691DJ
			Dilution Factor: 1					
				Analysis Time...: 19:13	Instrument ID...: M01		Analyst ID.....: 021088	
					MS Run #.....: 1337110			
Cobalt	90	(80 - 120)		SW846	6010B		12/03/01	EPP691D2
	90	(80 - 120)	0.07 (0-25)	SW846	6010B		12/03/01	EPP691D3
			Dilution Factor: 1					
				Analysis Time...: 19:13	Instrument ID...: M01		Analyst ID.....: 021088	
					MS Run #.....: 1337110			
Copper	NC	(80 - 120)		SW846	6010B		12/03/01	EPP691CU
	NC	(80 - 120)	(0-25)	SW846	6010B		12/03/01	EPP691CV
			Dilution Factor: 1					
				Analysis Time...: 19:13	Instrument ID...: M01		Analyst ID.....: 021088	
					MS Run #.....: 1337110			
Molybdenum	84	(80 - 120)		SW846	6010B		12/03/01	EPP691C8
	84	(80 - 120)	0.05 (0-25)	SW846	6010B		12/03/01	EPP691C9
			Dilution Factor: 1					
				Analysis Time...: 19:13	Instrument ID...: M01		Analyst ID.....: 021088	
					MS Run #.....: 1337110			
Nickel	NC	(80 - 120)		SW846	6010B		12/03/01	EPP691DD
	NC	(80 - 120)	(0-25)	SW846	6010B		12/03/01	EPP691DE
			Dilution Factor: 1					
				Analysis Time...: 19:13	Instrument ID...: M01		Analyst ID.....: 021088	
					MS Run #.....: 1337110			

(Continued on next page)

000045

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E1K300329 **Matrix.....: SOLID**
Date Sampled....: 11/28/01 08:30 Date Received..: 11/30/01 09:30

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #
Thallium	88	(75 - 125)		SW846 6010B	12/03/01	EPP691EH
	88	(75 - 125) 0.36 (0-25)		SW846 6010B	12/03/01	EPP691EJ
		Dilution Factor: 1				
		Analysis Time...: 19:13		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1337110				
Vanadium	87	(80 - 120)		SW846 6010B	12/03/01	EPP691EK
	100	(80 - 120) 5.6 (0-25)		SW846 6010B	12/03/01	EPP691EL
		Dilution Factor: 1				
		Analysis Time...: 19:13		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1337110				
Zinc	NC	(80 - 120)		SW846 6010B	12/03/01	EPP691EM
	NC	(80 - 120) (0-25)		SW846 6010B	12/03/01	EPP691EN
		Dilution Factor: 1				
		Analysis Time...: 19:13		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....: 1337110				

MS Lot-Sample #: E1K300198-001 Prep Batch #....: 1337296

Mercury	3.1 N	(80 - 120)		SW846 7471A	12/03-12/04/01	EPP691EP
	0.0 N,*	(80 - 120) 200 (0-20)		SW846 7471A	12/03-12/04/01	EPP691EQ
		Dilution Factor: 1				
		Analysis Time...: 13:56		Instrument ID...: M04		Analyst ID.....: 000023
		MS Run #.....: 1337138				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

000046

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC

Client Lot #....: E1K300329 Work Order #....: EPRDF1A2-MS Matrix.....: SOLID
 MS Lot-Sample #: E1K300329-001 EPRDF1A3-MSD
 Date Sampled....: 11/30/01 14:00 Date Received...: 11/30/01 16:50 MS Run #.....: 1337148
 Prep Date.....: 12/03/01 Analysis Date...: 12/05/01
 Prep Batch #....: 1337305 Analysis Time...: 19:21
 Dilution Factor: 1 Analyst ID.....: 033077 Instrument ID...: LC7

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
Acenaphthene	82	(50 - 150)			SW846 8310
	78	(50 - 150)	4.1	(0-50)	SW846 8310
Acenaphthylene	85	(50 - 150)			SW846 8310
	84	(50 - 150)	2.0	(0-50)	SW846 8310
Anthracene	83	(50 - 150)			SW846 8310
	79	(50 - 150)	5.5	(0-50)	SW846 8310
Benzo (a) anthracene	93	(50 - 150)			SW846 8310
	85	(50 - 150)	9.1	(0-50)	SW846 8310
Benzo (a)pyrene	88	(49 - 107)			SW846 8310
	80	(49 - 107)	9.3	(0-53)	SW846 8310
Benzo (b) fluoranthene	85	(50 - 150)			SW846 8310
	78	(50 - 150)	8.3	(0-50)	SW846 8310
Benzo (ghi) perylene	97	(50 - 150)			SW846 8310
	89	(50 - 150)	8.8	(0-50)	SW846 8310
Benzo (k) fluoranthene	90	(50 - 150)			SW846 8310
	82	(50 - 150)	9.4	(0-50)	SW846 8310
Chrysene	94	(50 - 150)			SW846 8310
	85	(50 - 150)	9.4	(0-50)	SW846 8310
Dibenz (a, h) anthracene	81	(50 - 150)			SW846 8310
	73	(50 - 150)	10	(0-50)	SW846 8310
Fluoranthene	89	(50 - 150)			SW846 8310
	82	(50 - 150)	8.9	(0-50)	SW846 8310
Fluorene	84	(43 - 112)			SW846 8310
	80	(43 - 112)	4.3	(0-56)	SW846 8310
Indeno (1, 2, 3-cd)pyrene	94	(54 - 114)			SW846 8310
	84	(54 - 114)	11	(0-51)	SW846 8310
Naphthalene	79	(44 - 110)			SW846 8310
	78	(44 - 110)	1.9	(0-50)	SW846 8310
Phenanthrene	87	(50 - 150)			SW846 8310
	81	(50 - 150)	7.1	(0-50)	SW846 8310
Pyrene	90	(49 - 115)			SW846 8310
	83	(49 - 115)	8.1	(0-54)	SW846 8310
<hr/>					
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>			
1-Methylnaphthalene	85	(41 - 115)			
	81	(41 - 115)			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000047

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: E1K300329 Work Order #....: EPRDF1A4-MS Matrix.....: SOLID
MS Lot-Sample #: E1K300329-001 EPRDF1A5-MSD
Date Sampled...: 11/30/01 14:00 Date Received...: 11/30/01 16:50 MS Run #.....: 1337164
Prep Date.....: 12/03/01 Analysis Date...: 12/04/01
Prep Batch #....: 1337324 Analysis Time...: 16:01
Dilution Factor: 1 Analyst ID....: 356074 Instrument ID.: G02

PARAMETER	PERCENT	RECOVERY	RPD	LIMITS	METHOD
	RECOVERY	LIMITS			
TPH (as Diesel)	82	(55 - 130)			SW846 8015B
	80	(55 - 130)	2.2	(0-35)	SW846 8015B

SURROGATE	PERCENT	RECOVERY	LIMITS
	RECOVERY	LIMITS	
Benzo (a)pyrene	85		(60 - 130)
	86		(60 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000048

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: E1K300329 Work Order #....: EPRDF1A6-MS Matrix.....: SOLID
 MS Lot-Sample #: E1K300329-001 EPRDF1A7-MSD
 Date Sampled....: 11/30/01 14:00 Date Received...: 11/30/01 16:50 MS Run #.....: 1338156
 Prep Date.....: 12/03/01 Analysis Date...: 12/03/01
 Prep Batch #....: 1338327 Analysis Time...: 16:36
 Dilution Factor: 1 Analyst ID.....: 999998 Instrument ID...: MSD

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
1,1-Dichloroethene	122	(65 - 150)			SW846 8260B
Benzene	122	(65 - 150)	0.64	(0-30)	SW846 8260B
Trichloroethene	120	(70 - 130)			SW846 8260B
	120	(70 - 130)	0.13	(0-30)	SW846 8260B
Toluene	124	(70 - 135)			SW846 8260B
	122	(70 - 135)	1.1	(0-30)	SW846 8260B
Chlorobenzene	88	(70 - 130)			SW846 8260B
	87	(70 - 130)	0.61	(0-30)	SW846 8260B
	87	(70 - 130)			SW846 8260B
	86	(70 - 130)	0.96	(0-30)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	78	(65 - 135)
	81	(65 - 135)
1,2-Dichloroethane-d4	107	(60 - 140)
	108	(60 - 140)
Toluene-d8	84	(70 - 130)
	84	(70 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000049

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: E1K300329 Work Order #....: EPRDF1A8-MS Matrix.....: SOLID
MS Lot-Sample #: E1K300329-001 EPRDF1A9-MSD
Date Sampled....: 11/30/01 14:00 Date Received...: 11/30/01 16:50 MS Run #.....: 1338166
Prep Date.....: 12/04/01 Analysis Date...: 12/04/01
Prep Batch #....: 1338348 Analysis Time...: 02:08
Dilution Factor: 1 Analyst ID.....: 001464 Instrument ID.: G15

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>RPD</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>		<u>LIMITS</u>	
TPH (as Gasoline)	101	(70 - 140)			SW846 8015B
	96	(70 - 140)	4.7	(0-40)	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
a,a,a-Trifluorotoluene (TFT)	124	(60 - 130)
	112	(60 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000050

Appendix B

APPENDIX B

SOIL SCREENING LEVEL (SSL) CALCULATIONS

Site-specific Soil screening Levels (SSLs) Assuming Impacts at Depths of 12 Feet bgs

CAS No.	Chemical	MCL (mg/L)	K _{oc} ^(1,2)	f _{oc} ⁽³⁾	K _d ^(2,4)	H' ⁽¹⁾	O _w ⁽³⁾	O _a ⁽³⁾	P _b ⁽³⁾	AF _T	Site-specific SSL (mg/kg) at AF _T = 1	Site-specific SSL (mg/kg) at AF _T at D=53' x DAF
107-06-2	1,2-Dichloroethane	5.00E-04	3.8E+01	5.19E-04	—	4.0E-02	2.53E-01	2.07E-01	1.44E+00	16	1.01E-04	3.31E-02
75-35-4	1,1-Dichloroethene	6.00E-03	6.5E+01	5.19E-04	—	1.1E+00	2.53E-01	2.07E-01	1.44E+00	16	2.20E-03	7.26E-01
100-41-4	Ethylbenzene	7.00E-01	2.0E+02	5.19E-04	—	3.2E-01	2.53E-01	2.07E-01	1.44E+00	16	2.28E-01	7.50E+01
108-88-3	Toluene	1.50E-01	1.4E+02	5.19E-04	—	2.7E-01	2.53E-01	2.07E-01	1.44E+00	16	4.30E-02	1.42E+01
	1,1,1-Trichloroethane											
71-55-6	(1,1,1-TCA)	2.00E-01	1.4E+02	5.19E-04	—	7.1E-01	2.53E-01	2.07E-01	1.44E+00	16	7.01E-02	2.31E+01
79-01-6	Trichloroethylene	5.00E-03	9.4E+01	5.19E-04	—	4.2E-01	2.53E-01	2.07E-01	1.44E+00	16	1.42E-03	4.69E-01
1330-20-7	Xylene (total)	1.75E+00	2.0E+02	5.19E-04	—	3.0E-01	2.53E-01	2.07E-01	1.44E+00	16	5.64E-01	1.86E+02

Notes:

An SSL was not derived for chemicals that do not have promulgated primary MCLs. These chemicals were not included in the assessment of potential for groundwater degradation at concentrations greater than MCLs.

Initial SSL derived using EPA July 1996 Soil Screening Guidance: Technical Background Document, where $SSL = MCL [(K_{oc} * f_{oc}) + ((O_w + O_a * H')/P_b)]$. AF_T calculated from LARWQCB May 1996 Interim Site Assessment and Cleanup Guidebook which accounts for attenuation in the soil assuming site-specific soil particle distribution and distance between impacts and groundwater table of 53 feet, and default DAF for EPA SSLs of 20 as presented in EPA July 1996 Soil Screening Guidance: Technical Background Document which accounts for limited groundwater mixing.

AF_T = Average attenuation factor based on site lithology (distance to groundwater = 53 feet, 30% sand, 57% silt, and 13% clay).

na = not available

K_{oc} = soil organic carbon-water partition coefficient (L/kg)

f_{oc} = site-specific organic carbon content of soil (kg/kg)

K_d = soil-water partition coefficient (L/kg), K_{oc} x f_{oc}

H' = dimensionless Henry's law constant

O_w = site-specific average water-filled porosity (by volume)

O_a = site-specific average air-filled porosity (by volume)

P_b = dry soil bulk density (kg/L)

⁽¹⁾ Obtained from EPA Region 9 preliminary remediation goal (PRG) physical-chemical data for volatile organic compounds, November 2000

⁽²⁾ Obtained from Risk Assessment Information System (RAIS) Toxicity & Chemical-Specific Factors Data Base, http://risk.lsd.ornl.gov/cgi-bin/tox/TOX_select?select=csf

⁽³⁾ Site-specific average values

⁽⁴⁾ Obtained from EPA Soil Screening Guidance: Technical Background Document (TBD), EPA/540/R-95/128, July 1996, <http://www.epa.gov/oerrpage/superfund/resources/soil/toc.htm>

Geotechnical Parameters for the BRC Former C-6 Facility, Los Angeles, California

Sample ID	Date Sampled	Depth (feet bgs)	Sieve Analysis (Soil Type)	Dry Bulk Density (kg/L)	Moisture Content (percent by weight)	Total Porosity (fraction by volume)	Air-filled Porosity (fraction by volume)	Water-filled Porosity (fraction by volume)	TOC* (mg/kg)	f _{oc} (fraction by weight)
EIA290176-001 (I-34-5)	1/29/2001	5	Silt	1.51	15.9	0.43	0.19	0.24	520	0.0005
EIA290176-010 (D-29-5)	1/29/2001	5	Silt	1.44	20.3	0.46	0.16	0.29	2350	0.0024
EIA29176-018 (I-25-5) Average	1/29/2001	5	Silt	1.34 1.43	17.8 18.0	0.49 0.46	0.26 0.20	0.24 0.26	690 1187	0.0007 0.0012
EIA290176-004 (I-34-20)	1/29/2001	20	Silt	1.54	17.5	0.42	0.15	0.27	330	0.0003
EIA290176-012 (D-29-20)	1/29/2001	20	Silt	1.55	17.0	0.41	0.15	0.26	430	0.0004
EIA29176-021 (I-25-20) Average	1/29/2001	20	Silt	1.37 1.49	20.2 18.2	0.48 0.44	0.20 0.17	0.28 0.27	410 390	0.0004 0.0004
EIA290176-007 (I-34-50)	1/29/2001	50	Fine sand	1.35	4.4	0.51	0.45	0.06	230	0.0002
EIA29176-015 (D-29-50)	1/29/2001	50	Fine sand	1.36	19.5	0.49	0.22	0.26	560	0.0006
EIA29176-024 (I-25-50) Average	1/29/2001	50	Silt	1.34 1.35	24.3 16.1	0.51 0.50	0.18 0.28	0.32 0.22	470 420	0.0005 0.0004

Weighted Fraction (depths 12 to 65 feet bgs)

1.44

0.46

0.21

0.25

0.0005

The weighted fraction by weight assumes the 5-foot sample is representative of the top 20 feet, the 20-foot sample of depths between 20 and 50 feet, and the 50-foot sample of depths between 50 and 65 feet bgs.

Notes:

The air-filled porosity values were calculated from gravimetric data, not volumetric data.

* f_{oc} = the weight fraction of organic carbon in soil = TOC/1,000,000

Soil Particle Size Distribution for the BRC Former C-6 Facility, Los Angeles, California

Sample ID	Date Sampled	Depth (feet bgs)	Sieve Analysis (Soil Type)	Median Grain Size (mm)	Particle Size Distribution, wt. Percent						
					Gravel	Sand Size				TOTAL	Silt
						Coarse	Medium	Fine			
EIA290176-001 (I-34-5)	1/29/2001	5	Silt	0.029	0.00	0.00	0.22	17.60	17.82	69.80	12.37
EIA290176-010 (D-29-5)	1/29/2001	5	Silt	0.027	0.00	0.00	0.02	17.00	17.02	68.41	14.58
EIA29176-018 (I-25-5)	1/29/2001	5	Silt	0.026	0.00	0.00	0.39	14.86	15.25	68.78	15.97
Average									16.70	69.00	14.31
EIA290176-004 (I-34-20)	1/29/2001	20	Silt	0.032	0.00	0.00	0.00	31.19	31.19	54.83	13.99
EIA290176-012 (D-29-20)	1/29/2001	20	Silt	0.036	0.00	0.00	0.90	27.59	28.49	59.67	11.85
EIA29176-021 (I-25-20)	1/29/2001	20	Silt	0.020	0.00	0.00	0.00	11.21	11.21	69.07	19.72
Average									23.63	61.19	15.19
EIA290176-007 (I-34-50)	1/29/2001	50	Fine sand	0.151	0.00	0.00	0.57	79.33	79.90	17.39	2.71
EIA29176-015 (D-29-50)	1/29/2001	50	Fine sand	0.083	0.00	0.00	3.26	47.93	51.19	39.79	9.01
EIA29176-024 (I-25-50)	1/29/2001	50	Silt	0.027	0.00	0.00	0.04	21.27	21.31	64.99	13.70
Average									50.80	40.72	8.47

Weighted Fraction (depths 12 to 65 feet bgs)

0.30	0.57	0.13
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The weighted fraction by weight assumes the 5-foot sample is representative of the top 20 feet, the 20-foot sample of depths between 20 and 50 feet, and the 50-foot sample of depths between 50 and 65 feet bgs.